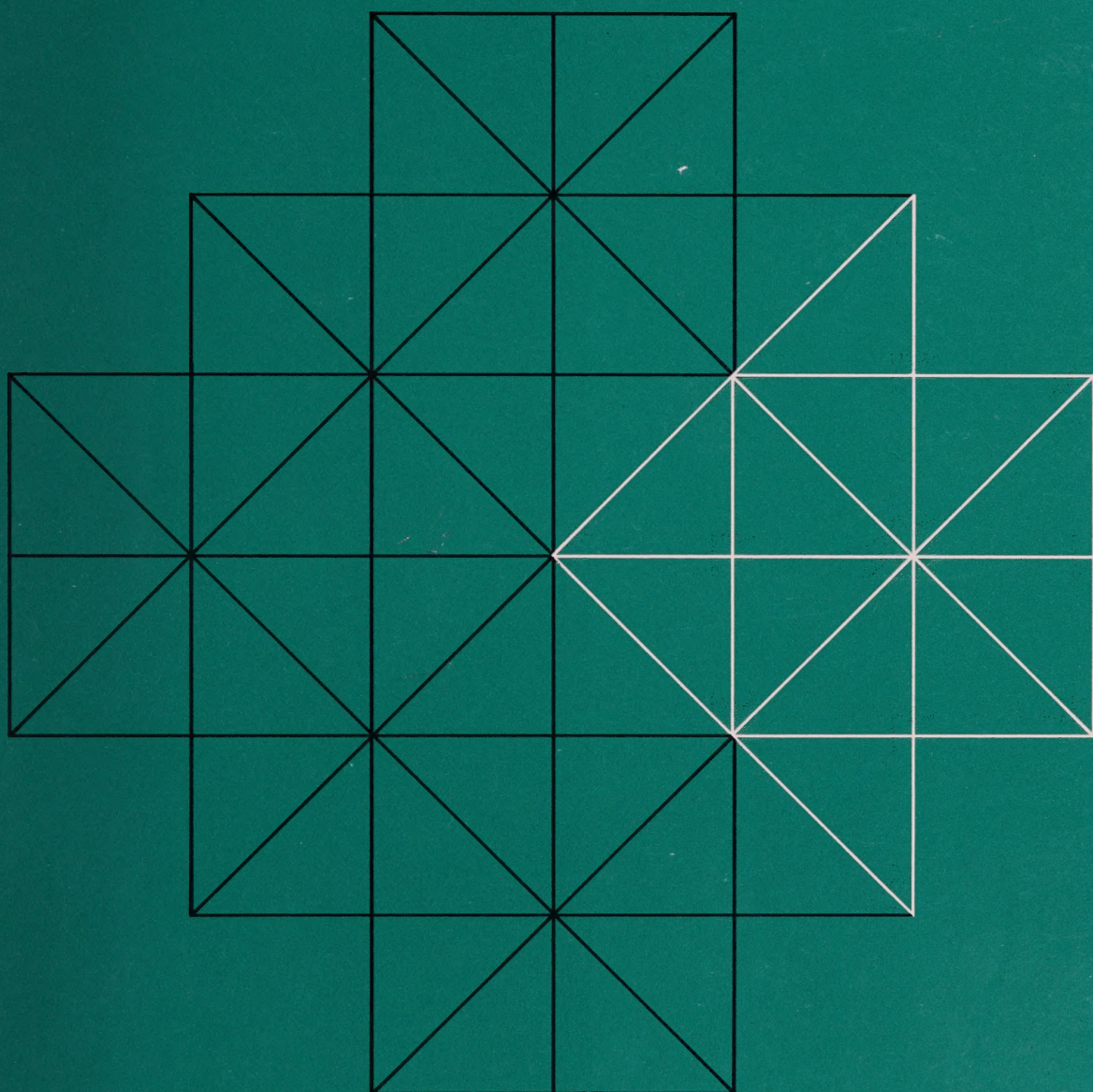


**Rush-
Presbyterian-
St. Luke's
Medical Center
Chicago**

**Rush University
Rush Medical College
Bulletin
1981-82**



Rush Medical College Calendar 1981-1982

Fall Quarter

Orientation and Registration for New Students	September 8-9
Classes Begin	September 10
Midterm Reading Period	October 12-13
Midterm Examination Period	October 14-16
Classes Resume	October 19
Finals Reading Period	November 19-20
Final Examination Period	November 23-25
Thanksgiving Recess	November 26-29

Winter Quarter

Classes Begin	November 30
Holiday Recess	December 23-January 3
Classes Resume	January 4
Midterm Reading Period	January 18-19
Midterm Examination Period	January 20-22
Classes Resume	January 25
Finals Reading Period	February 25-26
Final Examination Period	March 1-3
Spring Break*	March 4-10

Spring Quarter*

Classes Begin	March 11
Midterm Reading Period	April 16, 19-20
Midterm Examination Period	April 21-23
Classes Resume	April 26
Finals Reading Period	May 27-28
Memorial Day—No Classes or Exams	May 31
Final Examination Period	June 1-3
Commencement	June 5

*The Second Year Medical College Program follows a slightly different calendar.

The Third and Fourth Year schedules are based on four, six, eight and twelve week modules.

1981-82

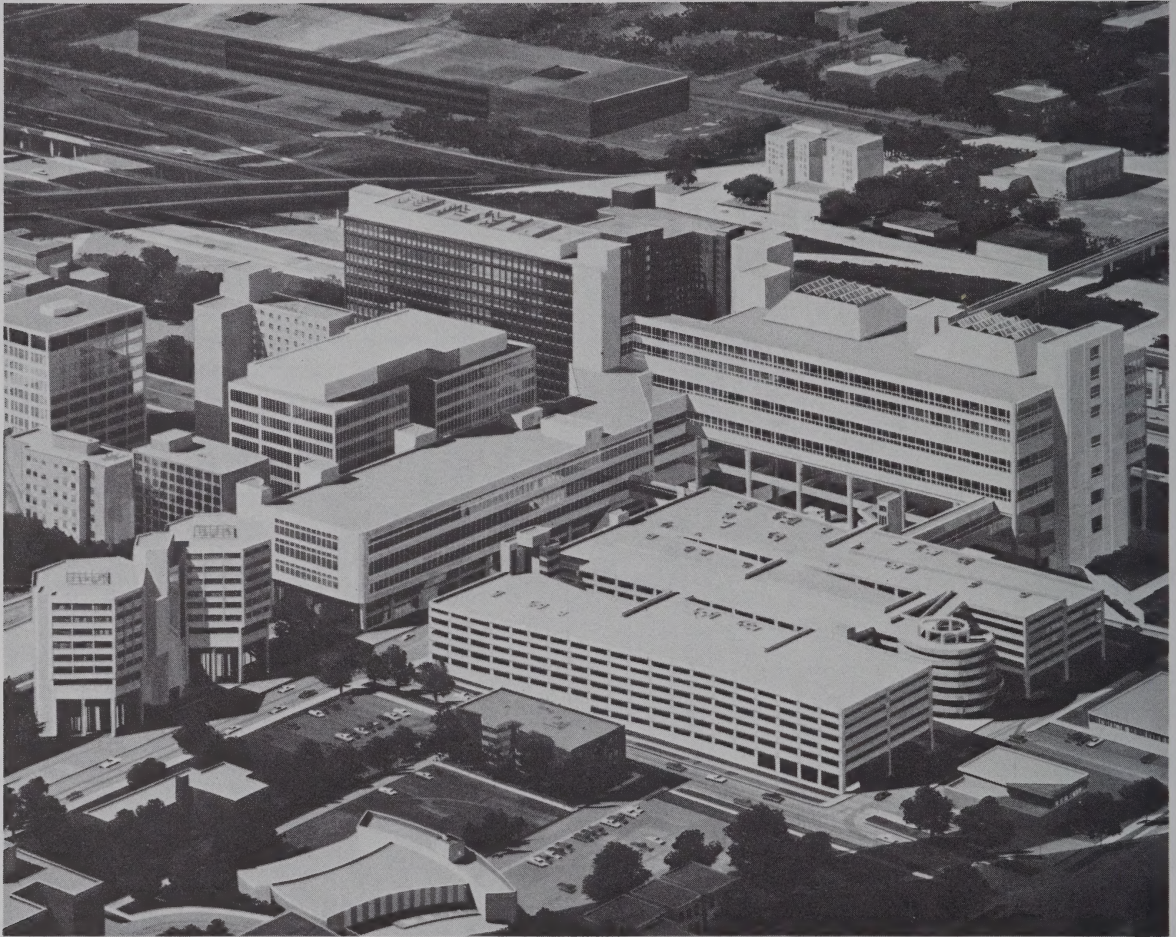
Rush-
Presbyterian-
St. Luke's
Medical
Center
Chicago

Rush University Rush Medical College Bulletin



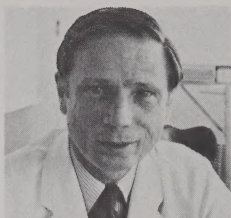
This Bulletin is published for the faculty, students, and prospective students of Rush Medical College. The College reserves the right to make changes in any or all specifications contained herein and to apply such revision to registered and accepted students.

Rush University
Rush Medical College
600 S. Paulina Street
Chicago, Illinois 60612



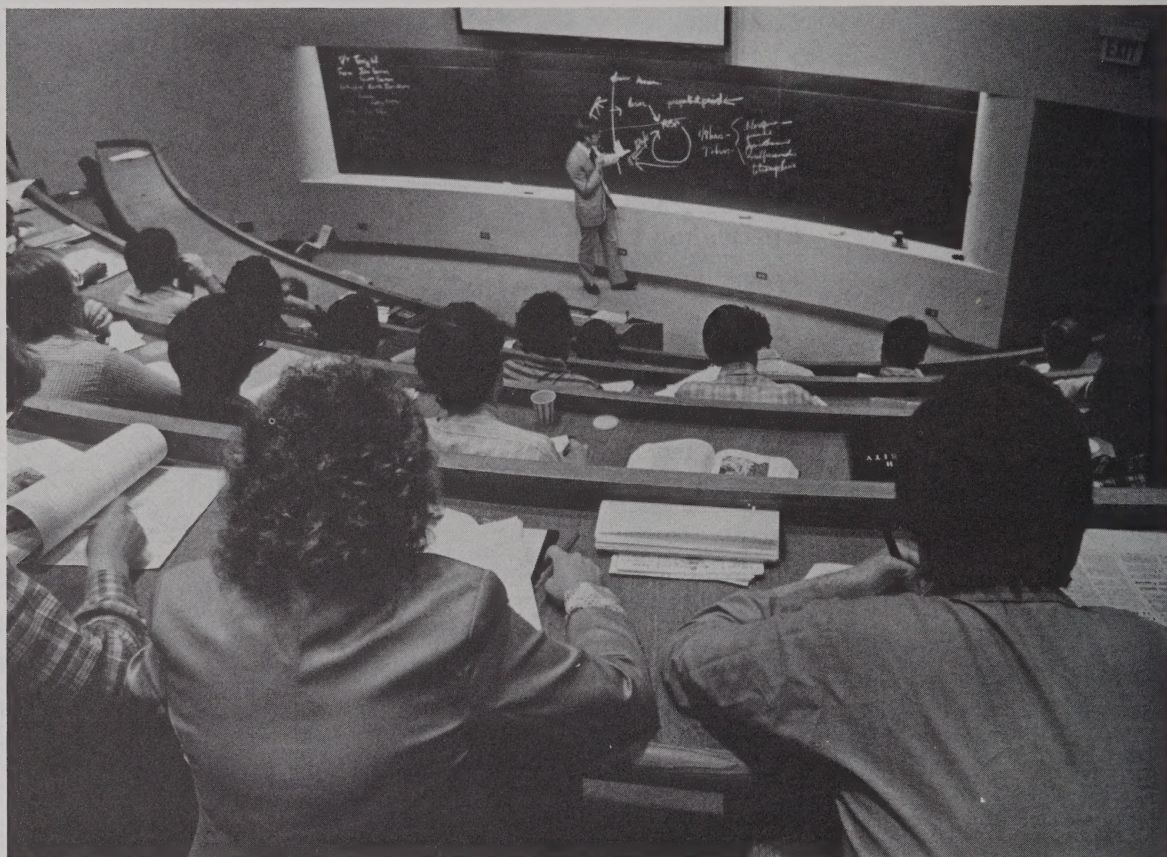
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"The development of the capacity for true intellectual independence is the essence of dealing with any type of problem requiring the mental elasticity and growth which a life in medicine demands. To achieve this habit of mind is a goal of the faculty not only for you students but also for themselves.

*James A. Campbell, M.D., President,
Rush-Presbyterian-St. Luke's Medical Center*



Goals

Learning Environment

The primary goal of Rush Medical College of Rush University is to provide an outstanding learning environment for future physicians within the most comprehensive, current, and humane patient care setting. This goal is consistent with the tradition of the university, which bases its academic programs in the health care system and strives to create interdependent excellence in patient care, education, and scientific investigation. Toward this end, the faculty of Rush University and the staffs of Rush-Presbyterian-St. Luke's Medical Center and its affiliated hospitals are developing a comprehensive health care delivery system which extends the same standard of care to all patients and offers the continuous, personalized concern, as well as the consistent application of available technology, that characterizes the best in patient care.

Rush Medical College, with the College of Nursing, the College of Health Sciences and The Graduate College, is part of the commitment of Rush-Presbyterian-St. Luke's Medical Center to develop a prototypical academic health care system. This voluntary system is directed toward providing quality education for sufficient numbers of health professionals to deliver care to a defined population of approximately 1.5 million people representing a diversity of social, economic, ethnic and racial backgrounds. The Rush network has as its core Rush-Presbyterian-St. Luke's Medical Center and extends at present to a network of thirteen hospitals in urban, suburban and rural areas and a neighborhood health center. The Rush network comprises over 5,600 beds, 160,000 annual admissions and 250,000 emergency outpatient visits.

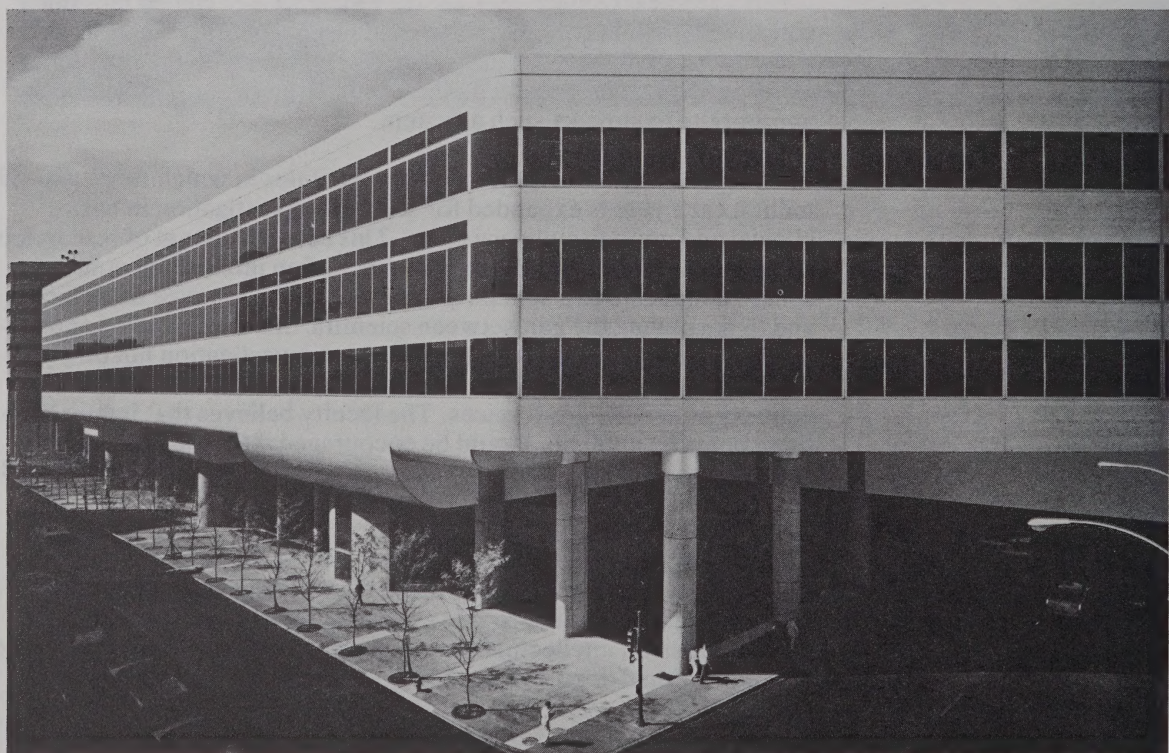
Rush Medical College seeks to develop a well-balanced program which will graduate approximately 120 physicians each year, at least half of whom will enter primary care disciplines, with the remainder entering specialties, research, and administrative areas in numbers appropriate to support such a system.

Research

The Medical Center includes research facilities in which more than \$9 million each year is expended for scientific investigation in basic, clinical and multidisciplinary areas. This active program of research is considered essential for the maintenance of an intellectual atmosphere conducive to a scholarly approach to the practice of medicine and to narrowing the gap between scientific discovery and its application to patient problems. Rush encourages investigation not only of normal processes and disease but also of the distribution and the delivery of health care services. The faculty believes that inquiry into these areas by students should be encouraged if they are to become practicing physicians who will continue to learn throughout their medical careers.

Single Standard of Care

Rush-Presbyterian-St. Luke's Medical Center is a new and vigorous system that is attempting to combine the necessary personnel, facilities and programs to provide a single standard of comprehensive health care in an intellectual and clinical environment which offers the best educational opportunities to tomorrow's health professionals.



The Rush Tradition

The University and the Medical Center

The establishment of Rush University in 1972 built on a heritage that stretches back to 1837. On March 2 of that year, two days before the City of Chicago was incorporated, the Illinois State legislature chartered Rush Medical College. In 1885, the St. Luke's Hospital Training School of Nurses, the first antecedent of the College of Nursing, opened its doors to offer diploma education in nursing. In 1903, the Presbyterian Hospital School of Nursing accepted its first students. The forebears of the College of Health Sciences and The Graduate College, which trains scholars in the basic sciences, can be traced to early members of the Rush Medical College faculty whose scientific inquiries led to numerous advances in the field of medicine.

Today, Rush University continues its tradition of commitment to the education of future health care practitioners and to the establishment of a rational system for the delivery of care to all segments of the population. The university is fully accredited to offer programs leading to the baccalaureate, master's and doctoral degrees, including the degree of doctor of medicine.

Affiliations with liberal arts colleges and universities provide students in the undergraduate programs of Rush University with solid foundations in the humanities and in the basic behavioral, biological, and physical sciences. A special program permits a small group of medical college students to complete the first year of the basic science curriculum at one of two affiliated colleges.

The Rush academic tradition bases the learning environment in the health care system. Rush-Presbyterian-St. Luke's Medical Center is the primary classroom of Rush Medical College.



Dr. Daniel Brainard, the founder of Rush Medical College, left Philadelphia and arrived in Chicago in 1836 when it was little more than a prairie village. He saw that the village would grow and soon need more physicians. Brainard had earned fame in the East and in Europe as an outstanding surgeon and investigator whose publications included studies on rattlesnake venom, the treatment of wounds with iodine, and the treatment of non-united fractures. Intimately correlated with Brainard's devotion to the practice of medicine and to research was his enthusiasm for medical education and teaching. It was his foresight and dedication that led him to gather a faculty for a new medical school and to name the college after Dr. Benjamin Rush, the Father of American Psychiatry and a signer of the Declaration of Independence.

Rush Medical College began its first session of 16 weeks on December 4, 1843, with 22 students enrolled. The first faculty included James Van Zandt Blaney, professor of chemistry, Austin Flint, Sr., professor of medicine, and John Evans, professor of obstetrics, who later founded Northwestern University and then became territorial governor of Colorado.

Advances in Medicine

Many significant advances in medicine were pioneered at Rush. In 1839, Dr. James Blaney opened the first free dispensary west of the Allegheny Mountains. Blaney discovered chloroform here simultaneously with C.H.Y. Simpson in England. He also helped organize the Chicago Board of Education and the Chicago and Illinois medical societies. Nicholas Senn, a Rush surgeon, performed the first operations on gunshot wounds of the abdomen and perforation of the intestines following trauma. The theory that disease can be contagious received early support from Graham N. Fitch, professor of obstetrics and women's and children's diseases, who documented the transfer of disease by infected clothing. James Nevins Hyde is credited with the first description of the influence of sunlight as a causative factor in skin cancer. The career of James B. Herrick included the first description of sickle cell anemia, the clinical description of coronary heart disease, and the demonstration of the electrocardiographic pattern of coronary occlusion.

Arthur Dean Bevan, an early chairman of the Department of Surgery, was the chairman of the Council on Medical Education of the American Medical Association which initiated the classic study, "Medical Education in the United States and Canada," and raised the required funds from the Carnegie Foundation for the historic report by Abraham Flexner. Willis J. Potts, a Rush graduate and faculty member, carried out studies in the Rush laboratories preliminary to the development of the "blue baby" operation. The husband and wife faculty team of George and Gladys Dick developed methods for diagnosis of and immunization against scarlet fever while at Rush.

Rush Medical College Founds a Hospital

In 1877, Rush Medical College voted to establish a hospital and to raise \$15,000 for the building. Under the direction of Dr. Joseph P. Ross, the school began construction of the hospital adjacent to the college building. The first section of Presbyterian Hospital opened in 1883, with subsequent additions of the David Jones Memorial section and the June Murdock section for women and children. At the dedication of Murdock Memorial in 1912, Dr. James B. Herrick articulated the philosophy which then and now has characterized Rush:

“The Presbyterian was founded with two high purposes, caring for the sick and aiding in medical education. The hospital that confines itself solely to the treatment of the sick is somewhat dwarfed. To be kept alive and progressive it should have the stimulus of the necessity of instructing young, active, wide-awake undergraduates, interns and nurses. This addition to the hospital gives us these facilities; it opens to the staff the opportunity of acquiring more knowledge and it also gives us added facilities for research. . . Unless the spirit of research is in a hospital, unless it pervades the various branches of the medical institution, the educational function of the hospital languishes and the atmosphere becomes stale; things fail to progress and the patients suffer. . . And yet no matter what view we may take, the central figure in the hospital is and should be, the patient.”

Over 10,000 physicians received their training at Rush Medical College and Presbyterian Hospital during the first century of their existence.

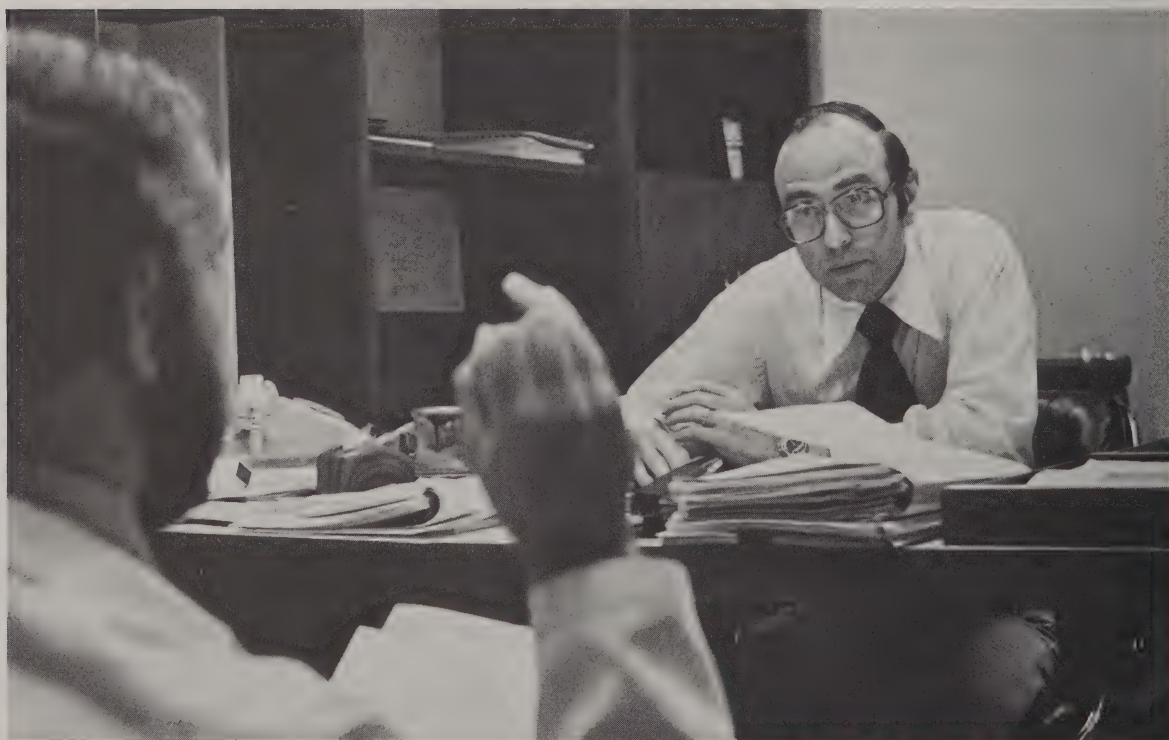
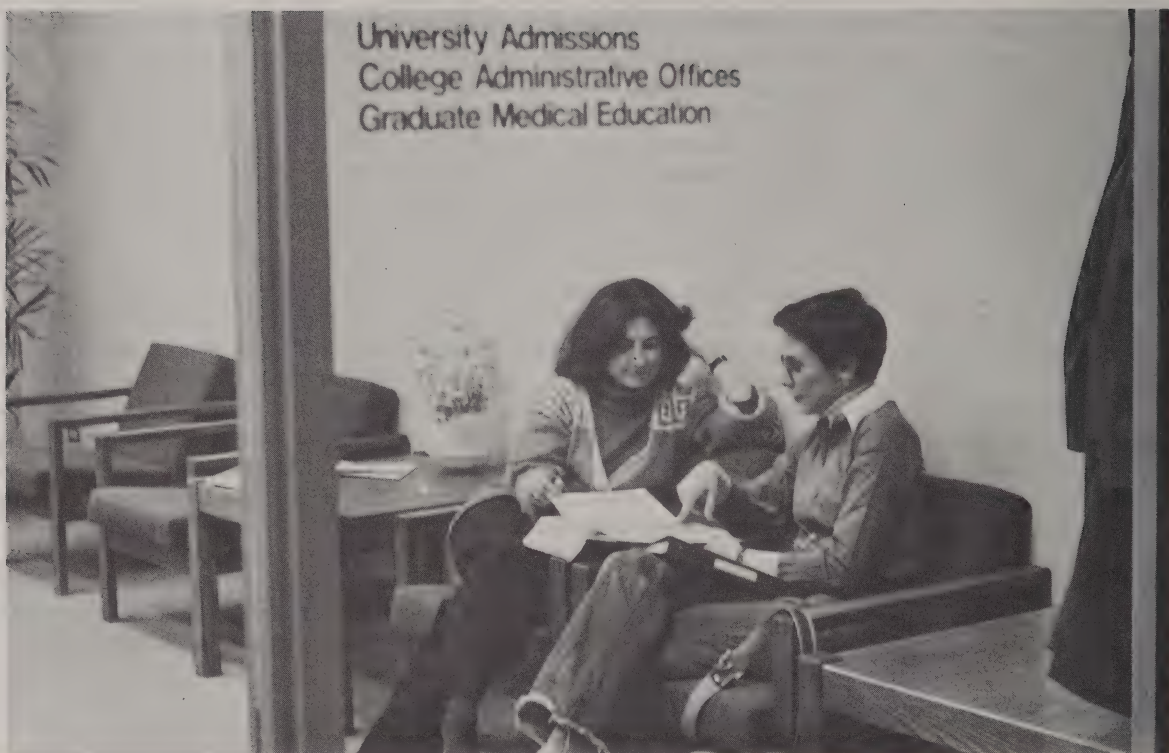
Uniting for Better Patient Care

A nominal academic affiliation existed between Rush and Lake Forest University from 1887 to 1898. In June 1898, Rush Medical College affiliated with The University of Chicago. In 1941, the affiliation ended and Rush Medical College closed, though continuing its corporate existence. The faculty continued undergraduate and graduate teaching responsibilities in medicine and the biological sciences as members of the faculty of the University of Illinois. In 1956, Presbyterian Hospital and the Dispensary merged with St. Luke's Hospital, founded in 1864, to create Presbyterian-St. Luke's Hospital and Health Center. In October 1969, Rush-Presbyterian-St. Luke's Medical Center was formed from Presbyterian-St. Luke's Hospital and Health Center and Rush Medical College. In March 1971, the members of the medical and scientific staffs of Rush-Presbyterian-St. Luke's Medical Center once again became the faculty of Rush Medical College. First-year and third-year medical students matriculated in the fall of 1971.

Accreditation and Approval

Rush University is accredited by the North Central Association of Colleges and Schools. Rush Medical College is accredited by the Liaison Committee on Medical Education of the American Medical Association and the Association of American Medical Colleges. The university has been granted approval by the Illinois State Board of Education to confer degrees, and approval has been given to educate veterans by the Department of Veterans' Affairs, State of Illinois.

University Admissions
College Administrative Offices
Graduate Medical Education



Admissions

Selection Process

Rush Medical College is strongly committed to the selection of individuals who will become vital members of the medical community as students, practitioners, educators, and researchers. Throughout the curriculum, emphasis is placed on the preparation of physicians who will function chiefly as medical practitioners, and who will be committed to the delivery of quality health care to a variety of populations, including those that are now underserved.

The selection process at Rush has been described by many applicants as more personal than most. Considerable time, energy, and empathy are invested by the Committee on Admissions and by the faculty and students who participate in the interviewing process. Because Rush seeks to train physicians who will be committed to meeting society's health care needs, the committee seeks excellence not only in academic achievement, but also in noncognitive factors such as character, goals, personality, accomplishments, and experience. High scholastic achievement is only a partial qualification for acceptance. The Committee on Admissions looks for individuals who exhibit social and intellectual maturity, personal integrity, motivation, and concern. Strong preference for admission is given to residents of Illinois.

Rush Medical College encourages applications from all applicants, regardless of race, sex, religion, color, marital status, age or national origin. Moreover, in furtherance of the nation's commitment to end discrimination on the basis of handicap, and in accordance with the provisions of Section 504 of the Rehabilitation Act of 1973 and all regulations properly issued thereunder to protect the rights of handicapped persons, it is the Medical Center's policy that no person or activity administered by Rush-Presbyterian-St. Luke's Medical Center which receives federal financial assistance shall exclude from participation, deny benefits to, or subject to discrimination, any individual solely by reasons of his or her handicap. The college is committed to attracting candidates who will help make the physician population more representative of the national population.

All inquiries about admissions should be addressed to:

The Office of Admissions
Rush Medical College
524H Academic Facility
600 South Paulina
Chicago, Illinois 60612
(312) 942-6913

Entrance Requirements

Admission to Rush Medical College depends upon satisfactory completion of a minimum of 90 semester hours (135 quarter hours) of undergraduate study before matriculation at the medical school.

Rush requires all entering students to have successfully completed at least two semesters of physics; two semesters of biology, with emphasis in zoology; two semesters of inorganic chemistry; and two semesters of organic chemistry. In lieu of two semesters of organic chemistry, students may take one semester of organic chemistry and one of biochemistry. Survey courses in the premedical sciences will not fulfill these requirements. Courses in mathematics, social sciences, and English are strongly recommended. The committee suggests that comprehensive courses be selected which include study

in the following areas: biology—molecular, cellular, developmental, and population; inorganic chemistry—properties of the elements, states of matter, chemical reaction, and aqueous solutions; organic chemistry—stereochemistry, covalent bonding, hydrocarbons, and organic compounds; physics—mechanics, electricity, wave characteristics, thermodynamics, nuclear structure, and optics.

Because the required courses provide the foundation upon which modern biological and medical sciences are built, the committee gives special attention to competence in these areas. The committee requires that all of the coursework submitted in fulfillment of specific admissions requirements must be evaluated on the basis of a traditional grading system. Such a system must employ a range of numbers or letters to indicate the comparative level of performance. If the applicant has received a grade of Pass/Credit for any courses on the required list, he/she must have the instructor supply, in writing, a statement evaluating the student's performance in that course. Applicants are advised to pursue subjects beyond the stated minimums if they have not done excellent work in the required courses.

Applicants who will have successfully completed three years of college consisting of a minimum of 90 semester hours or 135 quarter hours, who have no baccalaureate degree, but otherwise meet the requirements, will be considered.

Because of the rigorous competition for places in medical school, applicants are not likely to be admitted unless their academic records place them in the upper third of their college class. However, high scholastic standing does not assure acceptance to the school. The Committee on Admissions places great emphasis on its appraisal of the character, personality, and general background of the applicant.

Application Procedure

Rush Medical College is a cooperating member of the American Medical College Application Service (AMCAS), sponsored by the Association of American Medical Colleges. All applications to Rush must be initiated through AMCAS. This is accomplished in the following way:

1. Obtain an application request form from your pre-medical advisor or directly from AMCAS:

AMCAS
Suite 301
1776 Massachusetts Avenue, N.W.
Washington, D.C. 20036

Upon receipt of the completed form, AMCAS will mail an application packet.

2. Complete the AMCAS application indicating Rush Medical College on the designated list of schools. Please note that AMCAS strongly recommends receipt of your college transcripts at least two weeks prior to processing your application. The application deadline for admission is November 15; therefore, official college transcripts should be in the hands of AMCAS no later than November 1. Send only the material that has been requested. At this point in the application process, send nothing to Rush. Additional information will be requested as it is needed.

3. The application deadline for the Rush Medical College class entering in the following year is November 15. Applicants are advised that the deadline is firm. Consideration of late applications due to circumstances beyond the control of the applicant will require a letter from Rush to AMCAS giving AMCAS permission to process the material for Rush. The applicant must request this letter from the Rush admissions office and must include it with the AMCAS application.

4. In addition to the AMCAS application, all applicants must complete the new Medical College Admissions Test (MCAT). Applicants are encouraged to take the examination no later than April of the year of application; however, a medical school application may be submitted if the student plans to take the examination in September. Scores must be received from MCAT before full consideration can be given to a candidate for admission. It is advisable, therefore, to take the examination in April if at all possible. Application forms for the new MCAT may be obtained from your pre-medical advisor or by writing directly to:

MCAT Registration
The American College Testing Program
Box 414
Iowa City, Iowa 52243

5. All applicants receiving an AMCAS fee waiver automatically will receive waivers from any Rush application fees.

6. Upon receipt of their AMCAS application by Rush, all students will receive an information packet outlining the application procedure, timetables, and other pertinent information.

7. A personal interview is required of all students who are admitted to Rush Medical College. However, requests for interviews are generated only by members of the Committee on Admissions. Approximately 600 applicants are interviewed each year in Chicago. Applicants who are invited to be interviewed should plan to spend at least a half day at Rush, where they will meet two faculty members and, when possible, a student in interviews. Interviews are considered extremely important in assessing the candidate, as well as providing the applicant with an opportunity to appraise the academic environment at Rush.

Most medical schools, including Rush, have agreed to unified dates of acceptance. Those who have applied for the Early Decision Plan will be notified on October 1. Further notification of acceptance will be on November 15, December 15, January 15, February 15, and on a weekly basis from March 1 to the date of matriculation.

Rush believes that students should have the opportunity to select the school of their first choice; therefore, the medical college does not require a deposit to hold a position in the class.

Early Decision Plan

Candidates for whom Rush Medical College is the first choice may apply through an optional Early Decision Plan (EDP). This plan permits applicants to request and receive a decision from their first-choice medical school by October 1 before seeking acceptance elsewhere. In order to participate in the EDP, applicants must notify AMCAS of their intent. AMCAS must receive all application materials, including AMCAS application, official transcripts, and MCAT scores by August 1. Students electing the EDP option should be aware of certain factors considered by the Committee on Admissions:

1. Students must realistically appraise Rush Medical College as the school of first choice in terms of their goals in medicine. Applicants will not fare well in the personal interview if they are not well informed about the school and its program.

2. Rush may offer admission to up to 20 percent of its total entering class each year (24 of 120 places) by the EDP. However, the committee is under no obligation to fill the maximum number of EDP places. The college reserves the right to defer EDP position offerings until more comprehensive information regarding the total applicant pool is available. Students admitted by the EDP will have superior academic qualifications, clearly demonstrated sustaining motivation toward medicine, and personal integrity of the highest order.

Advanced Standing

Applicants who have completed a basic science curriculum which, in the opinion of the Office of the Dean, is equivalent to that of Rush Medical College at either a two-year medical school or a foreign medical school, and who satisfy the entrance requirements for first-year admission may be able to transfer into the clinical portion of the curriculum at Rush as third-year students. Successful passage of Part I of the National Boards or completion of the Medical Sciences Knowledge Profile is required.

Information regarding the availability of advanced standing positions may be obtained from the Office of Admissions.

Foreign Applications

Only students who are U.S. citizens or have permanent residency status will be considered for admission to Rush Medical College.

Reapplication

Reapplication may be made by submitting another application form to AMCAS by November 15 of the year of application. If Rush Medical College was listed as a choice in the previous application, the Rush Office of Admissions should be notified so that the applicant's file can be updated. If the applicant was interviewed in the previous year, additional interviews may not be required. Any pertinent experiences since the previous application should be included in the new application—graduate school, working in a hospital or in business, travel, or experience in other fields. All information, new and old, will be taken into account in reviewing the second application.

Accepted Students

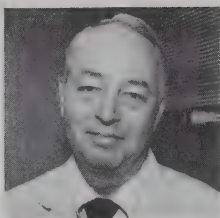
Many states require medical colleges to certify previous education of applicants for licensure. Therefore, official transcripts of all undergraduate and graduate studies completed must be on file in the Office of Admissions prior to matriculation.

Students Entering September, 1980

The 1980-81 first-year class of 120 students included 73 percent men, 27 percent women, and 16 percent minority. In the entering 1980 class at the Medical Center campus, three students had doctorate degrees, 12 had master's degrees, two were three-year candidates, and the balance had baccalaureate degrees. Fourteen students in the Knox-Rush program had baccalaureate degrees and two were three-year candidates; 15 students in the Grinnell-Rush program had baccalaureate degrees and one entered after the junior year.

Undergraduate majors included biology, chemistry, psychology, zoology, biochemistry, mathematics, natural sciences, physiology, preprofessional, psychobiology, biomedical engineering, economics, premedical, French, nutrition, engineering, political science, biophysics, physical therapy, humanities, art, chemical engineering, pharmacy, public health, nuclear engineering, radiology, physics, nursing and anthropology.





"Medical education at Rush fosters inquiry, facilitates the acquisition of knowledge, builds lifelong habits of learning, and recognizes the unique qualities of physician and patient as essential to the process of compassionate and effective care."

*Henry P. Russe, M.D., Vice President, Medical Affairs
and Dean, Rush Medical College.*



Curriculum

Philosophy

The process of becoming a physician is unique for each student who enters Rush. Each brings to his or her medical school experience a distinct educational, psychological and social background. As students define career goals, each develops personal ways of coping with the demands imposed by the physician's role. The Rush Medical College curriculum encourages pursuit of individual interests by emphasizing a solid foundation in the basic sciences and by offering a wide range of elective opportunities in our own Medical Center hospital and in a network of affiliated and associated hospitals. Throughout the program, students are encouraged to develop habits of self-education and enthusiasm for the life-long study of medicine according to specific interests and objectives. Upon matriculation, students are assigned an academic advisor whose primary responsibility is to provide guidance and serve as a resource for students as they define professional goals, select courses and deal with a variety of issues during their progress through medical school.

Long after students have taken their last medical school examinations, the sense of responsibility for the welfare of one's patients remains the most important stimulus to maintaining the highest level of professional performance. The Rush faculty seeks to provide educational opportunities and to create an environment that will foster the ability to meet these responsibilities with competence and compassion.

Organization

The four-year Rush curriculum provides an appropriate background for individuals with a diversity of professional career goals. The curriculum is based on establishing a solid foundation in the basic sciences and clinical medicine through a core of required preclinical and clinical courses. In addition, there is ample elective time for students to pursue individual interests.

**First Year at Medical
Center Campus**

The primary objective of the first year is to provide students with exposure to the vocabulary and the fundamental concepts upon which the clinical sciences are based. The first year is made up of three quarters of basic science material organized on a disciplinary basis and emphasizing the structure, function and behavior of the normal person. The following courses have been designated for each of the three quarters of the first year at the Medical Center.

Quarter I A—Fall

Course		Hours
(ANAT 471)	Gross Anatomy I	90
(ANAT 455)	Histology	72
(BIOCH 461)	Biochemistry I	40
(PHYSO 451)	Physiology I	68
Total		270

Quarter I B—Winter

Course		Hours
(ANAT 472)	Gross Anatomy II	90
(BEHAV 451)	Fundamentals of Behavior	43
(BIOCH 462)	Biochemistry II	38
(PHYSO 452)	Physiology II	63
Total		234

Quarter I C—Spring

Course		Hours
(BEHAV 453)	Behavior in the Life Cycle	33
(BIOCH 463)	Biochemistry III	33
(MICRO 451)	Microbiology Concepts	58
(NEURO 451)	Neurobiology	72
(PRMED 451)	Preventive Medicine	38
Total		234
Total Hours First Year		738

First Year at Knox or Grinnell

Rush Medical College has cooperative programs with Knox College in Galesburg, Illinois and Grinnell College in Grinnell, Iowa. These programs enable a group of 16 students each to complete the first-year curriculum on either of these campuses while enrolled in Rush Medical College. Students obtain basic science training comparable to that provided the first-year students at the Rush-Presbyterian-St. Luke's Medical Center campus, but in addition, participate in clinical tutorials which expose them to clinical practice in a small urban or rural community. Students in these programs may also take advantage of course offerings in the liberal arts and social sciences.

Knox and Grinnell were chosen to participate in this program because of their demonstrated excellence in the basic sciences, as well as their overall quality as liberal arts institutions. The Knox/Rush and Grinnell/Rush programs utilize existing facilities and highly qualified faculty to teach the medical sciences during the transition between undergraduate studies and the more specialized studies of medical education.

The Knox/Rush and Grinnell/Rush programs were designed with different types of students in mind:

- Students who wish to take advantage of the opportunities available on a liberal arts campus.
- Students who wish to have contact with medicine as it is practiced in a small community.

After completion of the first year at Knox or Grinnell, students come to the Rush Medical College at the Rush-Presbyterian-St. Luke's Medical Center campus in Chicago for the remainder of their medical school program.

Students who are considering the first-year programs at Knox or Grinnell should file their application in the usual manner and indicate on the supplemental application form their interest in these programs. Each of these campuses can be designated in the Early Decision Program. First-year students at Rush pay the same tuition to Rush Medical College regardless of the campus at which they carry out their studies. Fees for special activities and services may vary for students on different campuses.

**Rush at Knox College
First-Year Curriculum**

Curriculum*	
Course	Instructional Hours
Biochemistry	50
Biomedical Electronics	20
Biostatistics and Epidemiology	24
Cell Physiology	60
Counseling	50
Embryology	60
Health Service Institutions	34
Histology	60
Human Anatomy I, II and III	170
Medical Microbiology	60
Molecular Genetics	60
Physiology I and II	120
Clinical Tutorial	105
Treatment of Drug Abuse and Alcoholism	10
Total Hours First Year	883

Calendar 1981-82

Fall Term

Sept. 11-12	Orientation and Registration
Sept. 14	Classes Begin
Nov. 20	Classes End
Nov. 21-24	Examination Week
Nov. 25-29	Thanksgiving Recess

December Term

Nov. 30	Classes Resume
Dec. 19	Classes End
Dec. 20-Jan. 3	Christmas Vacation

Winter Term

Jan. 4	Classes Resume
Mar. 9	Classes End
Mar. 10-13	Examination Week
Mar. 14-21	Spring Recess

Spring Term

Mar. 22	Classes Resume
May 28	Classes End
May 29-June 1	Examination Week

*subject to change

**Rush at Grinnell College
First-Year Curriculum**

Curriculum*

Course	Instructional Hours
Behavioral Sciences	84
Biological Chemistry	80
Microscopic Anatomy	112
Human Anatomy	177
Human Nutrition	28
Human Physiology	110
Medical Microbiology	84
Neurobiology	126
Clinical Tutorial	58
Total Hours First Year	859

Calendar 1981-82

First Semester

Aug. 24	New Student Day; Classes Begin
Oct. 17-25	Semester Recess
Oct. 26	Classes Resume
Nov. 26	Thanksgiving Holiday
Dec. 12	Classes End
Dec. 16-20	Examination Period

Interim Session

Jan. 11-23

Second Semester

Jan. 25	Classes Begin
Mar. 20-April 4	Semester Recess
April 5	Classes Resume
May 15	Classes End
May 17-21	Examination Period

* subject to change

Second Year

During the second year, students are concerned with the study of the causes and effects of disease and with therapeutics. Students who carry out their first year at the Medical Center campus initiate their work with patients in programs which emphasize interviewing, history taking and the physical examination. Students coming from the Knox and Grinnell campuses participate in programs which further advance these patient care skills.

Quarter II A—Fall

Course	Hours
(PSYCH 501) Introduction to Psychopathology	33
(IMMUN 501) Immunology	53
(PATHO 501) Pathology	61
(PHARM 501) Pharmacology I	48
(INMED 501) Clinical Pathophysiology I	50
Total	245

Quarter II B—Winter

Course	Hours
(BEHAV 541) Observation and Communication	20
(INMED 502) Clinical Pathophysiology II	76
(CLTUT 511) Clinical Concepts and Skills	50
(PATHO 502) Pathology	67
(PHARM 502) Pharmacology II	46
Total	259

Quarter II C—Spring

Course	Hours
(CLTUT 512) Clinical Concepts and Skills	66
(INMED 503) Clinical Pathophysiology III	96
(PATHO 503) Pathology	63
(PHARM 503) Pharmacology III	19
Total	244
Total Hours Second Year	748

Third and Fourth Years

The curriculum of the third and fourth years provides students with training in clinical skills, diagnosis and patient management in a variety of patient care settings.

The clinical curriculum includes required core clerkships in family practice, medicine, neurology, pediatrics, psychiatry, obstetrics/gynecology and surgery requiring a total of 54 weeks. A total of 24 weeks of elective study in areas of special interest to each student is also required.

With but a few exceptions, the required core clerkships are taken at Rush-Presbyterian-St. Luke's Medical Center, Christ Hospital or Mt. Sinai Hospital Medical Center. Twelve of the 24 weeks of required elective work must be carried out at Rush-Presbyterian-St. Luke's Medical Center or at one of the affiliated or associated hospitals

within the Rush health care network. Up to 12 weeks of additional elective study may be carried out at other approved institutions.

Though scheduling of required core clerkships is somewhat flexible, students are encouraged to complete these clerkships early in order to make better use of elective options in the fourth year. Students participate in the assignment of required core clerkships, though the final decision concerning core and elective clerkship rotations rests with the dean's office.

Student Research Opportunities

Students are encouraged to have some research experience while they are in medical school. The opportunities range from laboratory experiences in the biomedical sciences to clinical investigation and field work in epidemiology, preventive medicine, and primary care. Such research can be carried out during summers or during time allotted for elective experiences. The dean's office provides a number of Student Fellowships to support such activities. A select group of students are chosen each year to participate in a National Institutes of Health supported program to provide special research training for students interested in pursuing careers in academic medicine. The student's academic advisor and the Office of Medical Student Programs will assist students in arranging for research experiences.

Concurrent M.D.-Ph.D. Programs

Rush University offers students the opportunity for studies which lead to both M.D. and Ph.D. degrees. These programs are particularly suited for students who aspire to careers in academic medicine and research. They enable students to obtain intensive training in specialized areas of the medical sciences while completing their medical studies.

The curricula for students in a combined M.D.-Ph.D. program vary widely depending on the individual's previous education, area of scientific study, and personal interests. Students in concurrent programs must meet the full conditions and requirements of The Graduate College and Medical College. However, course work leading to one degree may be acceptable as partial credit toward the formal requirements of the other degree. A properly coordinated program may afford a significant economy of time in completing studies toward both M.D. and Ph.D. degrees.

A student who enters Rush University with concurrent enrollment in a graduate program and the Medical College will most typically complete two years of the basic science components of the Medical College curriculum before becoming fully involved with meeting the requirements of the graduate program. Upon completion of the requirements for the Ph.D. degree, the student will return for the clinical portion of the medical program. Alternatives to this schedule are possible to enable students to develop programs which will most effectively meet their career objectives. Students already enrolled in the M.D. program may apply for admission to a graduate program in The Graduate College.

Ph.D. programs are offered in The Graduate College of Rush University in the following areas: Anatomical Sciences, Immunology, Pharmacology, and Physiology.

Admissions Procedures: All individuals applying to the Medical College should signify on the supplemental application their desire to

pursue concurrent studies leading to the the M.D. and Ph.D. degrees and the Ph.D. program(s) in which they have interest. Programs in The Graduate College so designated will be notified and the student contacted about subsequent steps to be taken in completing the application for the Ph.D. program.

Students completing their applications to a Ph.D. program before February 15 will be notified of action on the application no later than April 15. Students accepted into a graduate program but not immediately entering the graduate phase of study will be assured of appropriate resources to fulfill the academic requirements for the degrees, e.g. laboratory facilities and supervision for dissertation research. Advance commitment of fellowships, scholarships, assistantships or traineeships may not be possible. Students enrolled in the Medical College should contact the graduate program directly.

Academic Advisor Program

The Academic Advisor Program of Rush Medical College provides counseling and guidance for medical students in a manner that insures individual attention and continuity of contact between student and advisor. Each student is assigned an academic advisor and continues with the same academic advisor throughout his or her tenure at Rush Medical College.

Academic advisors are members of the faculty of Rush Medical College and each has responsibility for advising approximately 30 students. The Assistant Dean for Academic Counseling is responsible for program planning, coordination and evaluation.

Advisors are kept informed of current policies, procedures, and trends affecting students' participation in various programs of the medical school. They provide counseling in a number of areas, including course selection and scheduling, academic progress, and personal, educational and career development. Academic advisors assist each of their advisees in planning and implementing individual programs through each phase of undergraduate medical education.

Academic advisors are directly involved in the preparation of the Dean's letters of evaluation, which represent a summation of the student's progress while in medical school and are utilized in the application process for post-graduate medical education programs.

Pre-Matriculation Program

A Pre-Matriculation Program has been available for students desiring special support for the transition to medical school. The program introduced students to the study of basic medical sciences, emphasizing the development of improved learning techniques. The Pre-Matriculation Program provided an introduction to many of the courses students study during their first quarter in medical school. The three-week program has been held immediately before the start of regular studies. All entering students have been able to apply for participation in the program, though enrollment is limited.

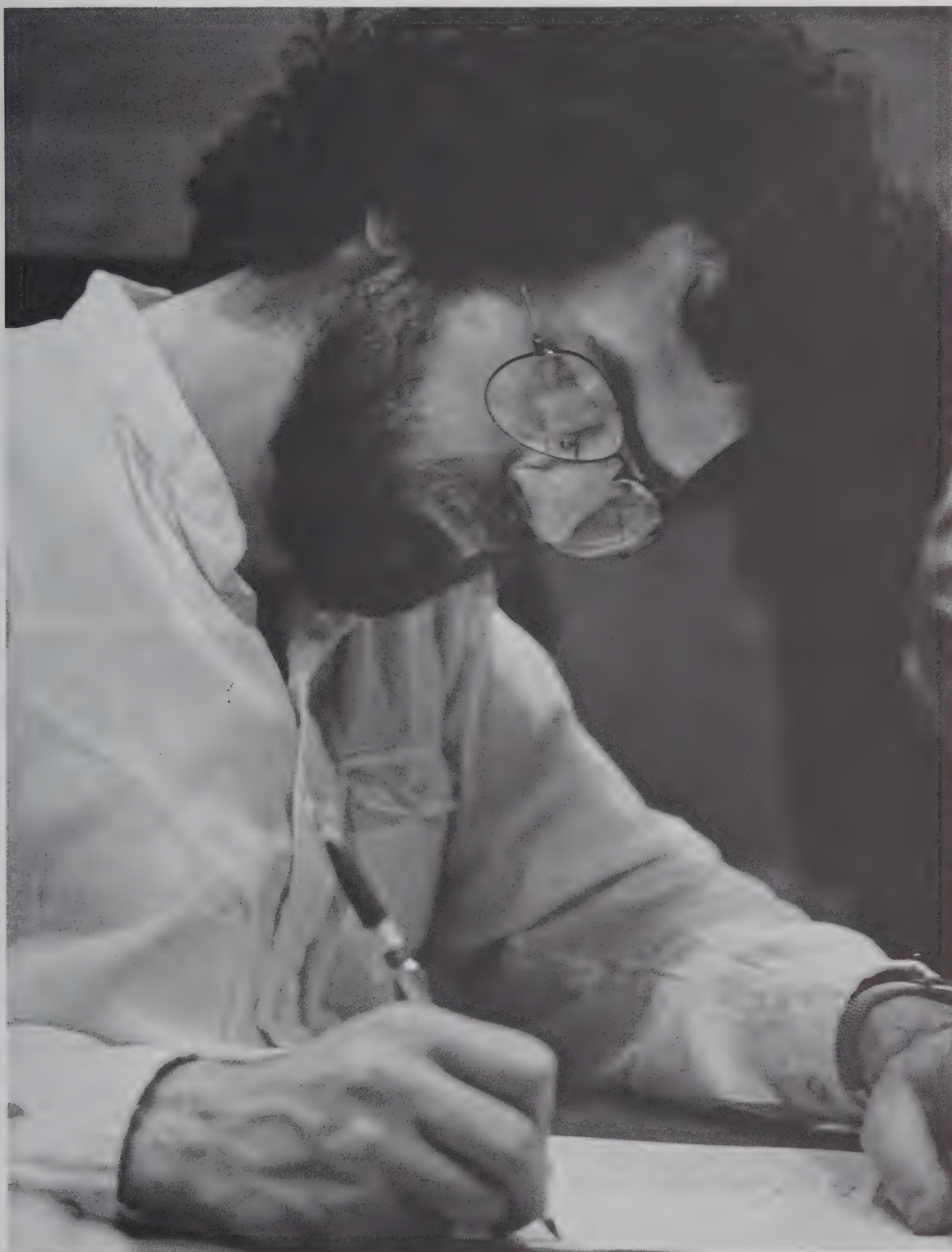


"The driving motivation for the entire medical staff and faculty, and its dean, is to provide a physician for each of us when we need one . . . a doctor who can relate to each of us individually, who knows what to do and how to do it, when we're sick."

William F. Hejna, M.D.

Senior Vice President

and Former Dean, Rush Medical College





Teaching Facilities

The College and the Medical Center

Rush Medical College is located on the campus of Rush University at Rush-Presbyterian-St. Luke's Medical Center on Chicago's near west side. The 19-building Medical Center complex includes: Presbyterian-St. Luke's Hospital; the Marshall Field IV Building and outpatient mental health facility; research buildings and academic facilities for Rush Medical College; the College of Nursing, the College of Health Sciences, and The Graduate College; two professional office buildings; apartment buildings; the Lorraine Armour Day School for children of employees and students; and the 175-bed Johnston R. Bowman Health Center for the Elderly, which provides older people with short-term restorative care, comprehensive ambulatory services, and residential apartments and which serves as a professional training facility in gerontology and geriatrics.

The Sheridan Road Hospital, a 139-bed hospital on the north side of Chicago, has been an integral part of the Medical Center since January 1976. It is centrally managed from the Medical Center and is staffed by members of the Rush-Presbyterian-St. Luke's Medical Center faculty and other health professionals. Rush house officers and medical students participate in the Hospital's patient programs.

New Academic Facility

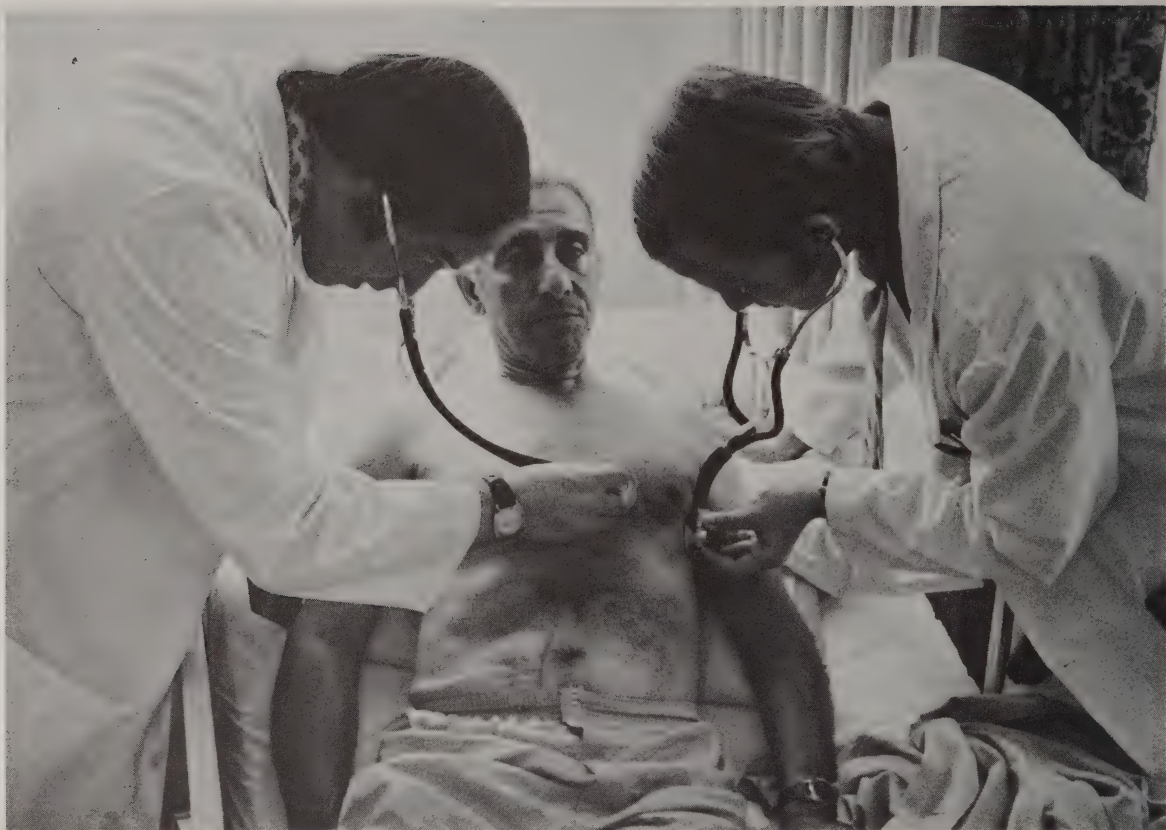
Rush Medical College activities are centered in the Academic Facility, dedicated on September 14, 1976. The structure accommodates large class activities, small group seminars and individual tutoring. This facility is the hub of activity of Rush University and its internal linkages to patient care areas allow students to interact easily with physicians and patients.

The building contains a large multidisciplinary laboratory which includes ten unit laboratories, each of which houses up to 20 individual student stations for basic science studies. A separate gross anatomy laboratory is designed on the same modular concept. A central dissection area and anatomical model room is connected to four dissecting modules, each with five tables. Two 150-seat lecture halls utilize equipment and services of the Center for Educational Resources. The center includes a learning resource laboratory equipped with audiovisual study carrels and computer terminals connected with the PLATO computer learning system.

The Library of Rush University, one of the oldest medical libraries in the Midwest, occupies approximately 22,500 square feet of two levels of the building. The library currently contains over 76,000 volumes, subscribes to over 1,600 periodicals, and conducts computerized searches of the medical literature through the Medline system of the National Library of Medicine. The library has an outstanding collection of over 3,000 rare medical books which is available for research and study.

Presbyterian-St. Luke's Hospital

Students of Rush University receive their clinical training primarily at Presbyterian-St. Luke's Hospital, a voluntary, not-for-profit hospital with a professional staff of 681 physicians and scientists and 397 house staff in graduate medical education in over 30 specialty areas. Each year, over 28,000 patients are admitted to Presbyterian-St. Luke's Hospital, using 873 beds and 30 bassinets. By tradition, each patient participates in the teaching programs of Rush University.



Network and Affiliated Hospitals

Rush-Presbyterian-St. Luke's Medical Center, together with associated and affiliated hospitals, a community health center, and a health maintenance organization, provides medical students, house staff, and nursing students with opportunities to participate in the practice of medicine in a variety of socioeconomic and ethnic settings in urban and rural areas. Elective clerkships in areas such as family practice, cardiology, advanced internal medicine, nephrology, and ambulatory care are available at affiliated institutions, as are graduate medical education programs in medicine, surgery, pathology, pediatrics, family practice, and obstetrics and gynecology.

Participating institutions are:

Rush-Presbyterian-St. Luke's Medical Center

Presbyterian-St. Luke's Hospital; 873 beds

Sheridan Road Hospital; 139 beds

Johnston R. Bowman Health Center for the Elderly; 175 beds

Associated Institutions

Christ Hospital, Oak Lawn, Illinois; 855 beds

Mount Sinai Hospital Medical Center, Chicago; 466 beds

Schwab Rehabilitation Hospital, Chicago; 67 beds

Affiliated Institutions

Bethany Hospital, Chicago; 160 beds

Central DuPage Hospital, Winfield, Illinois; 364 beds

Community Memorial General Hospital, LaGrange, Illinois; 276 beds

Copley Memorial Hospital, Aurora, Illinois; 320 beds

Galesburg Cottage Hospital, Galesburg, Illinois; 265 beds

Grant Hospital of Chicago, Chicago, Illinois; 508 beds

St. Mary's Hospital, Streator, Illinois; 248 beds

Skokie Valley Community Hospital, Skokie; 271 beds

Swedish Covenant Hospital, Chicago; 329 beds

West Suburban Hospital, Oak Park, Illinois; 374 beds

Mile Square Health Center, Inc., Chicago; an outpatient facility with over 38,000 patients registered

Major Affiliations

Students participate in clinical study at nearby Mount Sinai Hospital Medical Center. Mount Sinai is a 466-bed teaching institution providing outpatient and inpatient services to a broad metropolitan population. It is part of the West Side Medical Center Complex and is one mile from Rush. It provides extensive outpatient and health education services through the Sinai Medical Group, a series of group practices involving all the major medical specialties, including primary care. Clerkships in five of the required areas are offered at Mount Sinai Hospital.

Christ Hospital, the other major teaching hospital associated with Rush, has 855 beds and is located in the suburban south side of Chicago. It offers a wide range of both inpatient and outpatient clinical services to its neighborhood population. Christ Hospital participates in the teaching of required core clerkships in internal medicine, neurology, obstetrics/gynecology, pediatrics, and family practice.

Course directors and staff physicians at these two major teaching affiliates are members of the faculty of Rush Medical College.



Academic Policies

Requirements for Graduation

The following are prerequisite to the granting of the degree of doctor of medicine by Rush Medical College of Rush University:

1. The level of achievement required by the faculty for the degree of doctor of medicine must be attained in a minimum of 35 months.
2. Credit toward the M.D. degree may be granted to a student by the Office of the Dean for appropriate course work accomplished prior to matriculation at Rush Medical College.
3. A minimum of 78 weeks of instruction at Rush Medical College is required for students entering at the third year level from other medical schools. The Committee on Student Evaluation and Promotion may recommend additional quarters depending upon the progress made by the student following admission.
4. Each student's progress in each year of the Rush Medical College curriculum will be evaluated by the Committee on Student Evaluation and Promotion, and additional study may be required in any year for students with academic difficulty.
5. Students must pass all courses in the preclinical years before entering the clinical phase of the curriculum.
6. Students are required to pass Part I and complete Part II of the examinations offered by the National Board of Medical Examiners prior to graduation.
7. Students must pass all required clerkships and Part I of the examinations of the National Board of Medical Examiners before the date of Commencement in order to participate in Commencement ceremonies.

Additional medical education experiences beyond those required by the faculty may be audited without credit or tuition as approved by the course director and the Office of Medical Student Programs.

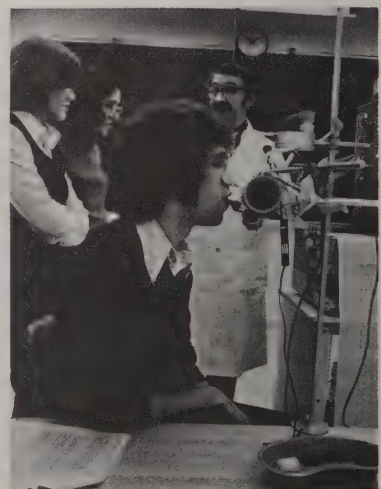
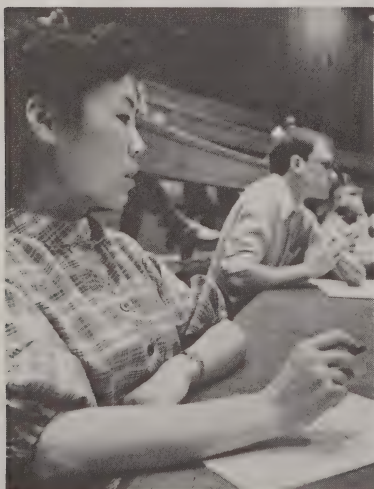
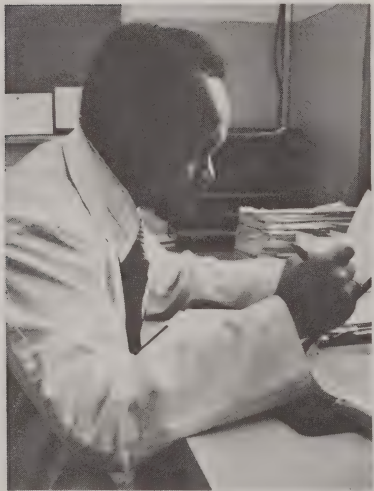
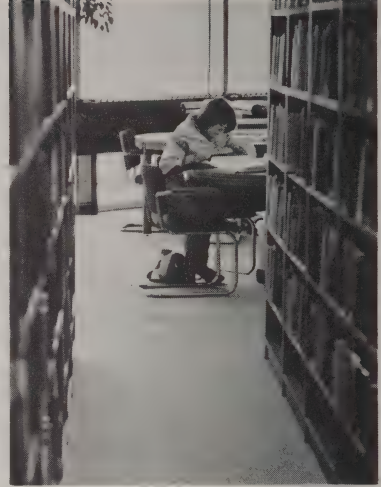
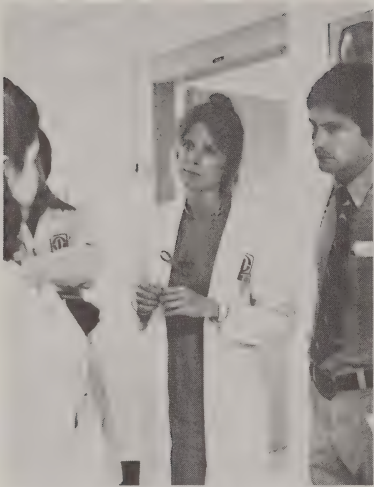
Evaluation and Promotion

Evaluation at the medical college is an important part of the learning process. Course examinations developed and given by the faculty are aimed at allowing both the students and the faculty to assess progress toward defined learning goals. The final result of evaluation in course work is recorded as honors, pass or fail. At the end of each quarter or clinical period, evaluations are submitted to the Office of the Dean and to the Committee on Student Evaluation and Promotion.

The Committee on Student Evaluation and Promotion is a standing committee of Rush Medical College. The committee determines when students have satisfactorily completed requirements for promotion and may require additional study by students who have not satisfactorily completed aspects of the medical college curriculum. It also recommends candidates for the degree of doctor of medicine to the Faculty Council and accepts the responsibility of recommending to the Faculty Council the dismissal of any student whose academic performance is not acceptable in the judgment of the committee.

National Board subtests are occasionally used by departments to evaluate course content. Scores from these examinations are kept confidential and are not available to any other institution or agency without written permission from the student. Students may review their complete academic record at any time.

Rush utilizes a system of student anonymity for all written examinations. Performance in courses is known only to the student, his/her



academic advisor, and appropriate members of the Dean's office, provided that a minimum passing level of achievement has been demonstrated. Ratings by clinical instructors and in most instances oral and written examinations form the basis of evaluations of student performance in clerkships and therefore also the basis of recommendations for residencies. At the time of application for postgraduate training, a letter of evaluation is written by the Office of the Dean, with major contributions from the academic advisor. Prior to the composition of this letter, an individual conference is held with the student and all pertinent factors for the letter of evaluation are assessed.

Governance

In January of each year, three students are elected by the student body to serve on the 22-member Faculty Council. In the same election, three students are elected to the 22-member Committee on Committees, which nominates members for the standing committees of Rush Medical College.

Students are eligible to be elected as voting members on the standing committees as recommended by the Committee on Committees. All committees of the college currently have student members.

The standing committees are:

Committee on Academic Freedom

Committee on Admissions

Committee on Affirmative Action

Curriculum Committee

Committee on Educational Appraisal

Committee on Educational Resources

Committee on Research

Committee on Senior Faculty Appointments and Promotions

Committee on Student Affairs

Committee on Student Evaluation and Promotion

Committee on Student Judiciary Review

The number and composition of college committees may change from time to time.

Student Records

The Family Educational Rights and Privacy Act of 1974 protects the privacy of current and former students enrolled in most educational institutions.

Rush University has five official student records. A student or former student may inspect and review these records after making an appointment with the appropriate office. The records and their locations are as follows:

1. Official academic record (transcript); Office of the Registrar, 101 Schweppe-Sprague.

2. Registrar's folder—contains admission application, transcripts from other schools, registration information; Office of the Registrar, 101 Schweppe-Sprague.

3. Dean's folder—contains written evaluations of clinical work, curricular flow charts, grade report copies; RMC Office of the Associate Dean, Clinical Curriculum, 524 Academic Facility.

4. Financial affairs folder—records showing all billing and payments, notes and correspondence dealing with a student's finance; Office of Student Financial Affairs, 101 Schweppe-Sprague.

5. Financial aid folder—all information concerning financial aid for the student; Office of Financial Aid, 101 Schweppe-Sprague.

Students may obtain copies of transcripts from the institutions that hold the original records. Other portions of their records will be copied upon request. The request must be in writing, signed, specifically identify the record desired, and include the student's major and year in school. There is no charge for copies of the student transcript. Other reproductions cost 50¢ per page. The university honors requests as long as there is no outstanding obligation to the Medical Center. Students within commuting distance may be asked to review the desired data in person.

Students may request that the university amend information in their records which they believe to be inaccurate, misleading, or which violates their privacy. If the university refuses to amend the records as the student wishes, he/she may request a hearing in order to challenge that decision. A hearing will be granted.

Students may place in their educational records statements commenting on information in the records and/or stating their grievances with a decision not to amend the record.

Those administrators who maintain the records adhere to a policy of limited access to administrators and faculty of Rush University having a need for information in order for their offices to function, to determine academic progress, or to designate award recipients. Other persons or organizations given access are those responsible for accrediting the institution, providing the student with financial aid, complying with a judicial court order and protecting the health and safety of students in an emergency.

Any disclosure of a student's record to others not listed in these policies must have prior written consent of the student. Requests for information and letters of consent of the student are kept with the records.

A student may waive any of his/her rights under the act and its regulations.

A student may file with the Family Educational Rights and Privacy Act office a written complaint regarding alleged violations of the General Education Provisions Act and its regulations.

Copies of the act and these written policies and procedures may be obtained from the Office of the Registrar, 101 Schweppe-Sprague.

Directory Information

Certain information is classified by Rush University as directory information: student's full name, local address, and phone number; date and place of birth, home town, major field of study, year in school or class, participation in officially recognized activities, dates of attendance, degrees and awards received, previous educational institutions attended by the student, and previous majors, degrees and years earned.

Each fall quarter, the Rush Student Address Book is published for the use of students, faculty and staff. It contains the student's name, local address and phone number, major and class.

Students may restrict the release of any item of information which is considered as directory information on a form provided in the Office of the Registrar, 101 Schweppe-Sprague by Friday of the first week of classes each quarter.

Human Investigation

Any project or study involving human subjects must have approval of the Medical Center Committee on Human Investigation. Studies in the community as well as within the Medical Center must have this approval. The Office of Research Administration handles all requests and has established the protocol for proper investigative procedures.

Prizes

The Nathan M. Freer Prize

This prize, endowed in 1892, is given to the outstanding senior of the year, as voted by the faculty. The recipient for 1981 was Sara Kennedy.

The Henry M. Lyman Memorial Prize

Endowed in 1908, this prize is given each year to a junior student for outstanding work. The recipient for 1981 was John D. Edwards.

The David Peck Prize

This prize is awarded to the student who has made an outstanding contribution to the Student National Medical Association. The recipient for 1981 was John LaFlore.

The Undergraduate Cardiology Award

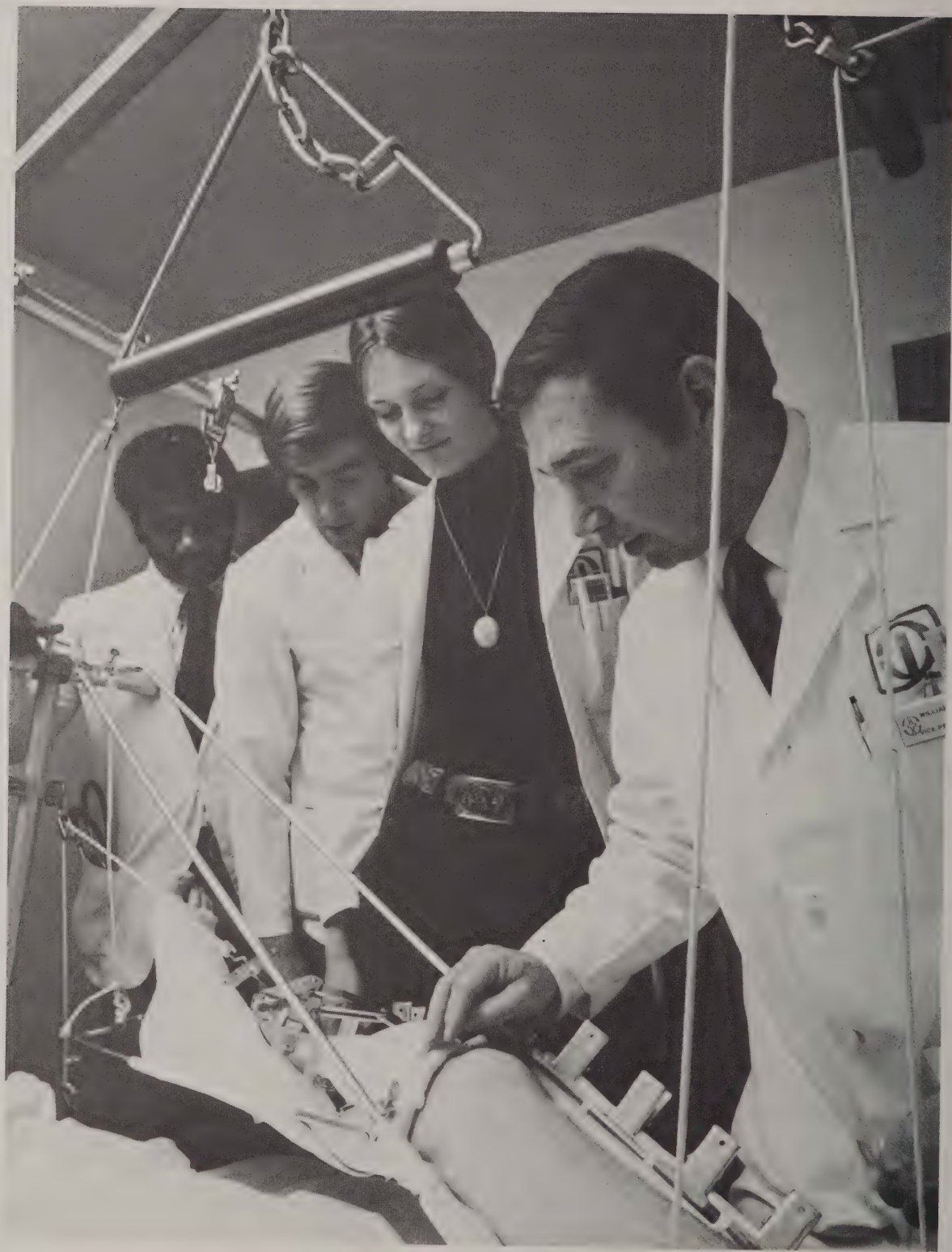
This prize is given to the graduating student who has had the best performance in a cardiology elective course. The recipient for 1981 was David Baldwin, Jr.

The Sir William Osler Pathology Prize

This prize is given to the medical student who has demonstrated the highest level of achievement in either experimental or diagnostic pathology. The recipient for 1981 was David Baldwin, Jr.

The Lemmon Company Student Award

This prize is given to the student in the graduating class who has excelled in the study of Family Practice. The recipient for 1981 was Dennis J. Weber.



Financial Affairs

Tuition and Fees

Tuition and fees are to a great extent based on anticipated revenue per student received from various sources. During the 1981-82 academic year, the medical college will receive a capitation grant from the State of Illinois of \$4,755 for each enrolled Illinois resident and from the federal government at an anticipated level of about \$411 per student. Since the federal and State of Illinois capitation grants, as well as expenses associated with medical education, may fluctuate, the charges for tuition and fees may be modified as considered necessary by the Board of Trustees.

Students may expect the minimum expenditures shown below for each three-quarter period of enrollment in the college. During the third and fourth years the student budget will cover expenses for a 12-month academic year.

Estimated Student Budget 1981-82

9-MONTH ACADEMIC YEAR

	Single At Home	Single On Campus	Single Off Campus	Married
Tuition	\$ 8,775	\$ 8,775	\$ 8,775	\$ 8,775
Activity Fee	10	10	10	10
Medical Insurance	100	100	100	600
Books & Supplies*	610	610	610	610
Housing and Utilities	0	2,210	2,550	2,925
Food	385	1,235	1,235	2,470
Transportation	935	230	400	800
Personal Expenses	765	765	765	1,530
Total	\$11,580	\$13,935	\$14,445	\$17,720
Monthly Living Expenses	\$230/mo	\$495/mo	\$550/mo	\$860/mo

*The books and supplies allowance will be \$770 for second-year students and \$480 per year for third- and fourth-year students.

While actively enrolled in Rush Medical College, all students are provided with single coverage in ANCHOR, a health maintenance organization providing a variety of professional services and ambulatory care, at no additional charge. In addition, all students are required to subscribe to Rush's group Blue Cross hospitalization plan or an equivalent hospitalization plan, from their date of matriculation until graduation. A separate fee is charged for coverage under Rush's Blue Cross policy. This fee for 1980-81 was \$33.00 per quarter for individual coverage and \$151.00 per quarter for family coverage.

Payment of Tuition and Fees at Rush University

The following statement represents the policy for all Rush University students:

Tuition and fees are to be paid, or satisfactory arrangements for payment made, with the Office of Student Financial Affairs before registration is complete. Students may not attend classes until after registration is complete. Any exception to this policy must be approved in writing by the Associate Dean for Academic Support Services. Students enrolled in first-year courses at Knox College or Grinnell College will be billed for tuition by Rush Medical College.

Students have the responsibility to complete one or a combination of the following courses of action on or before the first day of classes of each quarter:

1. *Pay total tuition and fees for the quarter.*
2. *Complete a Deferred Payment Plan Contract.* This plan requires that one-third tuition, all fees, and a \$15 service charge be paid on or before the first day of classes. Additional payments of one-third tuition are due on the fourth and eighth Monday of the quarter. Forms are available in the Office of Student Financial Affairs.
3. *Complete a Financial Aid Late Payment Form.* This form, initiated by the student and completed by the financial aid office, is to be filed when the student is receiving external aid and when that aid has not arrived at the university by the beginning of the term. This would occur, for example, when a guaranteed loan is needed to pay tuition and the proceeds from the bank have not been received by the beginning of the quarter. For that portion of tuition and fees not covered by this external aid, the student must complete step one or two above for the remaining amount. Forms are available in the Office of Student Financial Aid.

Those students who have not made satisfactory arrangements will be given notice by mail during the second week of classes that they are delinquent in their financial obligations to the university. The notification will inform the students that they have until Friday of the third week of classes to satisfy all such financial obligations. On Monday of the fourth week of classes, those students who have not made satisfactory arrangements will be notified that their registration has been cancelled for the quarter.

Students who choose the Deferred Payment Plan Contract and who fail to make a payment on the specified due dates will have notification mailed to them on Monday of the following week that they are delinquent in their financial obligations to Rush University. The notice will inform the students that they have until Friday of that week to satisfy their financial obligations without penalty, and that failure to do so will result in the cancellation of their registration for the quarter.

On Monday of the following week all students remaining delinquent under the Deferred Payment Plan will receive final notice that they have been dismissed, and that their dismissal has resulted in forfeiture of all previous payments made.

Any student dismissed under this policy will:

1. Be covered by Anchor/Blue Cross for the remainder of the quarter if the appropriate fees are paid.
2. Be dismissed from on-campus student housing.
3. Lose locker and mail privileges.

Students who are reinstated by decision of the Associate Dean for Academic Support Services will pay a reregistration fee of \$25.

Students who wish to reenroll should contact the Office of Medical Student Programs.

Refunds

Official withdrawal from any course or from the college entitles a student to a refund of tuition according to the following schedule: 100 percent refund if withdrawal is during the first calendar week in which classes begin; second week, 80 percent; third week, 60 percent; fourth week, 40 percent; fifth week, 20 percent. After the fifth week there will be no refund. College and university fees are not refundable.





Financial Assistance

General Information

The financial aid program has been established at Rush University to provide assistance to students who cannot afford to pay the full cost of education through their personal or family resources. Both scholarships and loans are awarded to students, although the majority of funds available are in the form of loans.

With the exception of the Health Education Assistance Loan, all funds are awarded to students on the basis of financial need. Accordingly, students and their families will be expected to contribute toward educational expenses to the fullest extent possible. The level of the expected contributions is determined by analysis of financial information provided by the students and their families on the Graduate and Professional School Financial Aid Service (GAPSFAS) form. If the available resources fall short of meeting budgeted costs, the financial aid office will attempt to award sufficient financial aid to make up the difference. Whether or not sufficient funds will be available to meet all student needs will depend upon future increases in the cost of education and the amount of funds annually allocated to the school by the federal government and private lenders.

Rush University Loan and Scholarship Programs

Application Procedure

The Rush University Student Financial Aid Handbook and applications for aid from the university will be mailed to all students who have been accepted into Rush Medical College and to any other students upon request. To be considered for financial aid from all sources, the student should file the following documents:

1. Rush University Financial Aid Application.
2. Graduate and Professional School Financial Aid Service statement (GAPSFAS). The Rush Medical College code number to be used on this form is 2706.
3. Financial Aid Transcript. A Financial Aid Transcript must be completed by each school previously attended. Transcript forms are available in the Office of Student Financial Aid.
4. Guaranteed Student Loan or Federally Insured Student Loan application. Applications are available at banks.
5. Application for all outside scholarship programs for which the student may be eligible, for example, Jewish Vocational Service, National Medical Fellowship, Model Cities, etc. (References are available in the financial aid office for more details.)

Application Deadline

Financial aid is awarded sequentially, as applications are received, until all funds have been expended. In order to receive maximum consideration for aid from Rush University, application forms should be submitted by April 1. Students admitted after April 1 should submit applications as soon as possible after receiving them.

Renewability of Financial Aid

The student must resubmit all financial aid application forms each and every year in which financial aid is being requested. Renewability will be contingent upon the student having continued financial need and upon the availability of funds.

Counseling Services

The Office of Student Financial Aid is open on a daily basis during regular business hours for consultation with students and parents on all matters regarding financing a Rush University education. Students and parents are welcomed and encouraged to make use of these services.

Scholarship Funds

Alexander Brunschwig Memorial Scholarship

This fund was established by the family, friends, and patients of Alexander Brunschwig, a graduate of the Rush class of 1927. Dr. Brunschwig earned an international reputation for his pioneer work in the radical surgical treatment of pelvic cancer.

Basic Education Opportunity Grant (Pell Grant)

This federal grant (gift aid) program is based solely upon the student's financial need and is designed to provide the first portion of a student's aid package. Awards currently range up to a maximum of \$1,750 per year. Only students who have not obtained a bachelor's degree are eligible.

Exceptional Financial Need Scholarship Program for First-Year Students

Under this federal program, eligible students will receive a grant award which will provide full tuition payment, an allowance for books and supplies, and a stipend of \$485 per month for 12 months. To be eligible, students must be first-year medical students of "exceptional financial need," which has been defined as having no financial resources whatsoever. All medical students who want to be given consideration for this scholarship program must submit parental financial information even if they are independent. Funds provided allow the awarding of only a few EFN Scholarships.

The EFN Scholarship provides support for the student only during the first year of medical school. The award is an outright grant which does not require any repayment or service obligation. However, recipients of the EFN Scholarship will be given priority consideration if they should choose to enter the National Health Service Corps Scholarship Program in their second year, although they are under no obligation to do so.

Faculty Wives Scholarship

A scholarship fund for Rush University students has been established by a generous contribution from the wives of the faculty. These scholarships are awarded on the basis of academic potential and financial need.

Faculty Women's Scholarship

A generous contribution from the women of the Rush University faculty has provided a scholarship fund for female students in Rush University. Awards are based upon character, academic promise and financial need.

Clark W. Finnerud Scholarship

A scholarship fund was established by Clark W. Finnerud, M.D., and his friends and grateful patients. Dr. Finnerud was a graduate of the Rush Medical College Class of 1918. He was a distinguished dermatologist and educator and a member of the Rush faculty from 1924 to 1942.

Eunice Goebel Greeley Scholarship

A scholarship fund in the memory of his beloved wife, Eunice Goebel Greeley, given by her husband, Paul W. Greeley, M.D., Professor Emeritus of Surgery at Rush. The scholarship is to be granted annually to any Rush medical student who has completed the first year of medical study. The applicant to be selected must be a motivated individual in scholarship, personality and compassion.

Illinois State Scholarship Commission (ISSC) Monetary Award Program

Monetary awards are made by the Illinois State Scholarship Commission to help meet the financial needs of Illinois residents attending Illinois schools. Awards currently range up to a maximum of \$1,900 per year and are based strictly upon financial need. Students apply directly to the Scholarship Commission and receive a Notification of Status informing them of the level of their award. Students who have completed more than 225 quarter hours of study or who have attained a baccalaureate degree are ineligible for the state scholarship program.

Philip N. Jones, M.D., Scholarship

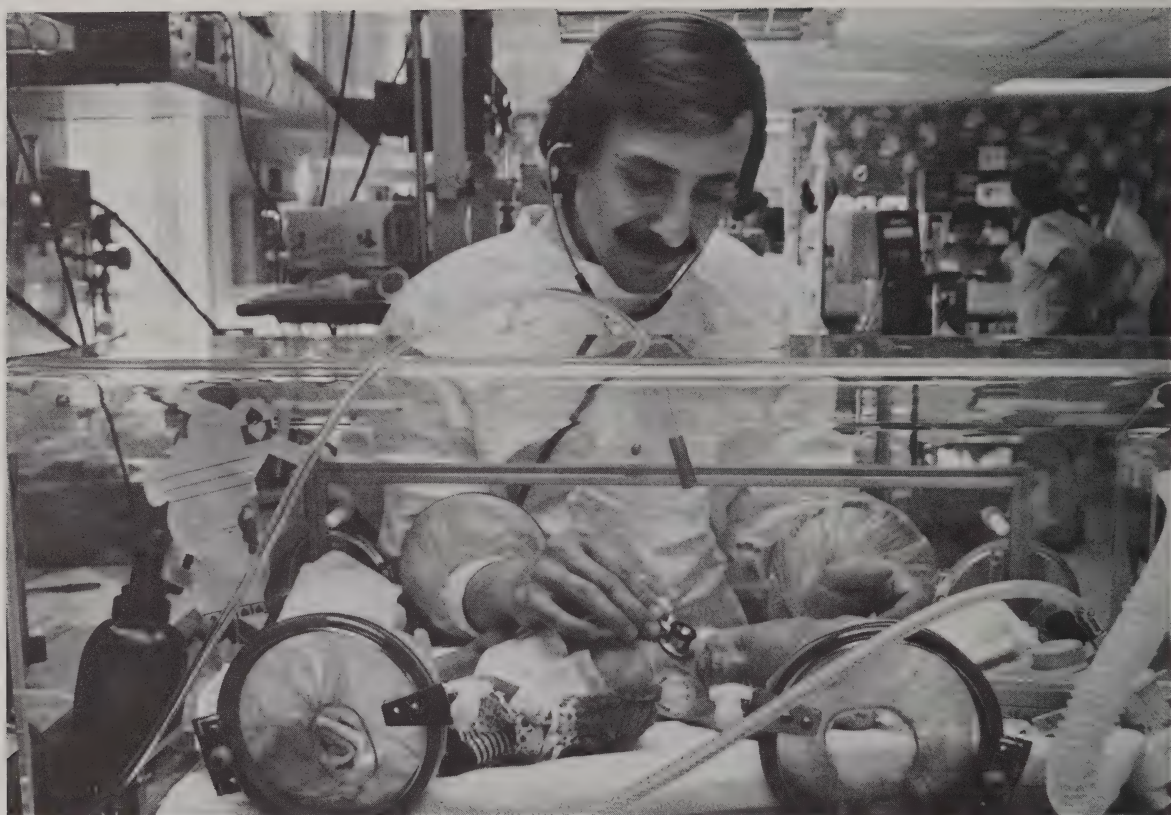
Patients of Dr. Philip N. Jones, a member of the staff of Rush-Presbyterian-St. Luke's Medical Center and the faculty of Rush Medical College, have honored him by establishing the Philip N. Jones Scholarship, awarded to a needy student in the college of medicine.

Laurel E. Keith, M.D., Scholarship

This fund was established by Dr. Laurel E. Keith, Senior Attending, Presbyterian-St. Luke's Hospital, and Associate Professor of Pediatrics, Rush Medical College. The fund is available to a student in need without regard to race, religion or place of residence, and who by the usual criteria, has performed admirably in the Department of Pediatrics.

Earl Leimbacher, M.D., Endowed Scholarship

The fund was established in honor of Dr. Earl Leimbacher, Rush Medical College graduate of 1934, an outstanding surgeon in the Joliet area, and a dedicated teacher and scholar. This program provides scholarship monies to needy students of Rush Medical College.



Marcus and Theresa Levie Educational Fund of Jewish Vocational Service
Funds are made available to Jewish men and women, legally domiciled in Cook County, Illinois, whose financial need cannot be met by other means of support. Applications can be obtained from the Jewish Vocational Service, One South Franklin Street, Chicago, Illinois 60606.

National Medical Fellowships

Students from minority groups currently under-represented in the medical profession, specifically American Blacks, Mexican Americans, Puerto Ricans, and American Indians, who have been accepted by an accredited U.S. medical school for study leading to the M.D. degree are eligible to apply. Applicants must be citizens of the U.S. or have made application for U.S. citizenship and must demonstrate financial need. Applications can be obtained from the National Medical Fellowships, 250 West 57th Street, New York 10019.

Rush Medical College Student Aid Fund

Scholarship and student loan funds are available for students on the basis of need. These funds have been made available through contributions from private donors and institutional sources.

The Rush-Presbyterian-St. Luke's Medical Staff Scholarship

The attending staff of Rush-Presbyterian-St. Luke's Medical Center have established a scholarship for medical students in need of financial support. The support of the attending staff has been a significant source of scholarship assistance.

Heyworth N. and Catherine Sanford Scholarship

An endowed scholarship program was created in memory of Heyworth N. and Catherine Sanford. Dr. Sanford was a graduate of Rush Medical College.

Dr. Charles H. Solomon Scholarship Fund

This fund was established under the will of Sarah M. Solomon in honor of her husband, Dr. Charles H. Solomon, a graduate of Rush Medical College, to provide scholarship grants to worthy and needy students in Rush Medical College.

C. M. Swale Scholarship

An endowed scholarship fund created to benefit the students of Rush Medical College.

Loan Funds

Carl O. Almquist, M.D., Student Loan Fund

The Carl O. Almquist, M.D., Student Loan Fund was established in memory of Dr. Almquist, a graduate of the Rush Medical College Class of 1926. The fund is to be made available to students from northwest Indiana. Students are required to repay these loans over a period of five years beginning five months after graduation. The interest begins five months after graduation and is charged at five percent.

Broda O. Barnes and Charlotte W. Barnes Student Loan Fund

This fund, established by the Webster Barnes Foundation, provides financial support for students of Rush Medical College who are in good scholastic standing and who exhibit a proven need for such support. Special consideration is given to those students who exhibit an interest and aptitude in the field of physiology. Students are required to repay these loans beginning five months following graduation at a rate of interest of five percent.

Irene Cavanaugh Student Loan Fund

This loan fund was established through the M. Irene Cavanaugh Trust to assist medical students in financial need. Repayment begins five months after graduation at an interest rate of five percent.

Edna Dunning Trust Fund Loan

The Edna Dunning Trust Fund Loan has provided significant loan monies to offset tuition costs for students at medical schools in the Chicago area. The loan carries an interest rate of five percent while the student is engaged in medical education and ten percent during the repayment period. Deferment of principal repayment is possible for those students selecting a residency in the Chicago area. Otherwise, the repayment period will extend over a period of five years, beginning six months after graduation.

Faculty Wives Emergency Loan Fund

The Rush University faculty wives have made money available for emergency loans to students in the college of medicine. It is anticipated that these loans will be repaid in a short period of time so that the fund may be maximally utilized.

Donald W. Fergusson Memorial Loan Fund

Established in memory of Donald W. Fergusson, payment of principal and interest on this loan are deferred until five months after the student graduates. Interest begins at that time at five percent. Awards are made by the financial aid office on the basis of academic promise and financial need.

Guaranteed Student Loan Program or Federally Insured Student Loan Program

These are loan programs in which students make application directly to participating lending institutions (banks, savings and loans associations, credit unions, etc.), with the state and federal governments acting as guarantor for the funds. Interest at nine percent is charged during repayment, which begins six months after the student leaves school. During residency training, borrowers are eligible for up to two years deferment. The annual maximum allowed under the program is \$5,000 for full-time graduate students; the cumulative maximum is \$25,000. Applications are available at the lending institutions.

Guibor Student Loan Fund

A loan fund has been established in memory of George Guibor, M.D., an alumnus of Rush Medical College. The loan is interest free while the student is enrolled in school and five percent interest is charged during the repayment period, which begins five months after graduation.

Health Education Assistance Loan (HEAL)

Under the HEAL program, medical students may borrow up to \$15,000 per academic year to a total of \$60,000 from participating lending institutions. The rate of interest is the rate on Treasury Bills plus 3½ percent and interest is charged while the student is in school and during residency training. Repayment of principal and interest begins nine months after completion of formal training (including accredited residency programs) and the borrower may have 10 to 15 years to repay the loan.

Health Professions Loan Program

The Health Professions Loan Program is funded by a federal capital contribution and a supplementary contribution from the university. Awards are made by the financial aid office based on the federal definition of "exceptional financial need." Because this definition does not recognize student independence, all students who want to be given consideration for this loan program should submit parental information even if they meet the criteria of student independence.

John and Lawrence Jacques Loan Fund

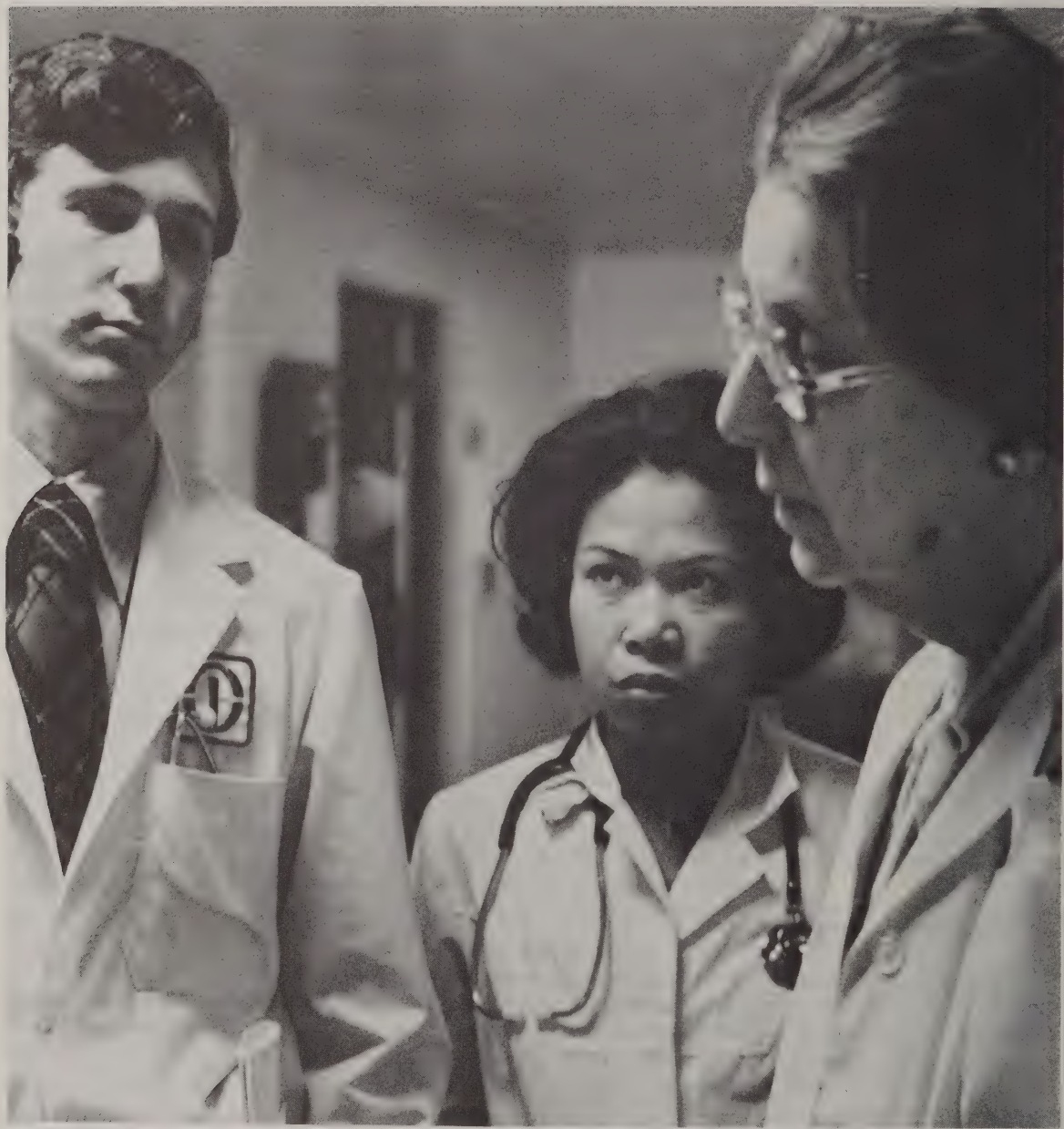
Both John Jacques, who fled Russia in the 1890s, and his son, Lawrence Jacques, who was born in Chicago, were graduates of Rush Medical College. John received his degree in 1896 and Lawrence in 1923. Father and son became outstanding Chicago physicians and teachers. Lawrence Jacques formed one of the first pre-paid group practices in medicine. This loan fund was established by the family and patients of Lawrence Jacques. Loans must be repaid within five years after graduation. No interest is charged, but a compensatory gift to the fund is requested of the student.

Grace M. Marshall Loan Fund

A loan fund established by the Grace M. Marshall Educational Foundation to benefit students in medicine, law or science. Loans are repayable one year after graduation and carry an interest rate of three percent during the repayment period.

Dr. David Monash Student Loan Fund

Loans are made to students with need from this fund which has been established to honor the career of Dr. David Monash, a distinguished Chicago obstetrician. Repayment of principal and interest begins five months after graduation at an interest rate of five percent. Students have five years in which to repay the loan.



National Direct Student Loan Program

Funds under this campus-based federal loan program are awarded by the financial aid office on the basis of financial need. Principal and interest are deferred until six months after leaving school and up to two years during residency training. During repayment, interest is charged at four percent. Students have up to ten years to repay the loan, except that a minimum monthly repayment of \$30.00 may be required. The cumulative maximum for graduate students is \$12,000.

National Republic Bank Loan Program

This loan program is awarded by the financial aid office on the basis of financial need. Only third and fourth year students are eligible. Interest is charged during the entire life of the loan at the rate of 9½ percent, although the university has been subsidizing the interest charged while the student is enrolled. Repayment of the principal begins after graduation and is at the rate of \$100 per month.

Frederick Henry Prince Trust Student Loan Fund

Established by the trust of Frederick Henry Prince, a well-known Chicagoan, this loan is principal and interest deferred while the student is in school and for five months thereafter. Interest begins at that point at the rate of five percent. The student has five years in which to repay this loan.

Simon M. Shubitz Student Loan Fund

This loan fund was established by Simon M. Shubitz, who graduated from Rush Medical College in 1936. He is a distinguished physician of Los Angeles, California; Fellow, American Academy of Family Physicians, American College of Cardiology; and Founding Fellow of the American Geriatrics Society. These loans are granted without interest to Rush medical students in good academic standing and in need of financial aid. Loans must be repaid within five years after graduation. In lieu of interest, each loan beneficiary is requested to contribute to the principal of this loan fund to benefit future students.

Employment

College Work-Study Program

This is a federal student employment program wherein students with demonstrated financial need work part-time to help meet the costs of attendance. Work-study awards and job placement are made by the Office of Student Financial Aid.

Institutional Employment

There are some opportunities for students to work part-time within the institution. Students should be mindful, however, that the academic workload may preclude them from working during the academic term. Such employment is handled through the regular Medical Center employment process.

Scholarship Service Programs

National Health Service Corps Scholarship Program

The National Health Service Corps Scholarship was established by the federal government to address the problem of maldistribution of health professionals within the country. Full scholarship support is provided to the student in return for a contractual agreement to serve in a federally designated shortage area one year for each year of scholarship support. The minimum service commitment is for two years. The scholarship benefits include payment of full tuition, a stipend of \$530 per month for 12 months per year (increasing each year with the percentage increase in federal service salaries), plus an allowance covering average expenditures for books, equipment, etc. Upon completion of their training, NHSC scholarship recipients will be assigned to a federally designated Health Manpower Shortage Area, which are located for the most part in rural areas, although there are a few inner-city sites as well. The service obligation may be deferred for up to three years after graduation to complete residency training. The penalty for breaking a service obligation contract will be payment of three times the amount of scholarship support received plus a maximum interest penalty.

Illinois Family Practice Scholarship

The Illinois Department of Public Health sponsors a "scholarship loan" program which provides support for medical students in return for their contractual agreement to serve in a designated physician-shortage area within the State of Illinois. In order to be eligible, students must be residents of Illinois and they must demonstrate need for financial assistance.

During the 1980-81 academic year, scholarship benefits provided for full payment of tuition and fees, and a stipend of \$400 per month for 12 months. To fulfill the service obligation, the scholarship recipient must establish a practice in one of the designated shortage areas in Illinois and remain in the practice on a full-time basis one year for each year that the student received assistance. The service period may be deferred until completion of a primary care residency program. Preference of location will be given to those who complete a residency in family practice. Failure to meet the terms of the contract would require the recipient to reimburse the state three times the total amount of the "scholarship loan" over the same period of time that the loan was made.

Armed Forces Scholarship Program

Three branches of the Armed Services (Army, Navy, and Air Force) have scholarship programs for medical students. These provide full tuition plus books, a stipend of \$400 per month for 10½ months and a higher stipend for 1½ months of summer service. The minimum service obligation is three years, not including a possible residency in a service hospital. The students should contact the local recruiting office of the branch of the service in which they are interested.



Student Life

Faculty Advisor Program

The Faculty Advisor Program of the medical college provides counseling and advice on a personal level. In addition to being assigned an academic advisor who is a member of the Office of Medical Student Programs, each student has the opportunity to use other members of the faculty as additional sources of counseling and guidance. The primary role of these other advisors is to provide students with focused counseling in specific areas, such as information about specific graduate medical education programs at the time when students are considering postgraduate training. Students obtain help in identifying appropriate supplementary advisors from either their academic advisor or the Assistant Dean for Academic Counseling.

Health Services

The University has authorized a two-part program of medical service to protect and promote the health of its students. One program is ANCHOR, a health maintenance organization oriented toward illness prevention, which provides a variety of professional services and ambulatory care.

While a student is actively enrolled in Rush University, single coverage in ANCHOR is provided at no charge; however, coverage does not begin until an ANCHOR application is properly filled out and signed at the Office of Financial Affairs. A new application must be filled out during the first week of the quarter for all new students and whenever a student is rejoining the ANCHOR program after a lapse in coverage such as summer vacation.

In addition, all students are required to notify the Office of Financial Affairs prior to the end of spring quarter to indicate whether they want continued, summer coverage. If summer coverage is desired, they will be required to pay the appropriate fee at that time.

A student's spouse and dependents may also be enrolled in the ANCHOR program for an additional fee. This can be done by filling out a change in coverage card when the student first becomes married or has a child, or at open enrollment during the first week of each quarter.

Costs for 1981-82 participation are: (Per Quarter)

ANCHOR	While enrolled	Not enrolled
Single	-0-	\$ 56
Couple	\$ 56	\$112
Family	\$130	\$186

The second portion of the medical service program is a group BLUE CROSS hospitalization policy. From the date of matriculation until graduation (including summer quarters), all students must maintain either their own separate hospitalization policy or subscribe to Rush's group policy. Accordingly, all students must decide *prior to actual matriculation* whether or not to join Rush's policy. If a student is already covered elsewhere or intends to seek coverage elsewhere, proof of such coverage will be required during fall registration. Such proof must be brought to registration and would consist of a current hospitalization policy or a member identification card. In addition, it is the student's responsibility to notify the Office of Financial Affairs

immediately of any changes that could result in a lapse of hospitalization coverage. An example of such an occurrence would be when a student attains an age at which his/her parents' coverage will no longer apply. Prior to any such lapse in coverage, the student must decide to either join Rush's policy or seek other alternative coverage. It is the student's responsibility and in the student's best interest to be certain that no such lapses in hospitalization coverage occur.

If a student wants to drop his/her Blue Cross coverage during the school year, he/she must first show proof of similar coverage elsewhere.

A student's spouse and dependents may also be enrolled in Rush's Blue Cross plan for an additional fee. This can be done by filling out a change of coverage form for family coverage when the student first becomes married or during open enrollment which is the first week of each quarter. A child is covered under the family plan at no additional charge; however the child's name must be added to the policy before the coverage is effective. This can be done by filling out a change of coverage form at the Office of Financial Affairs.

Costs for 1980-81 participation were:

Blue Cross	Per Quarter	Summer Plan
Single	\$ 33	\$ 33
Family	\$151	\$151

Students not enrolled in Rush University are ineligible for the university's health insurance.

Counseling Services

The Student Counseling Center is a place in which to discuss study and learning difficulties, marital and relationship stresses, and any other matters which may be hindering growth and development. In addition to individual and couple counseling, the center offers group and workshop experiences. Concerns common to many students are often addressed effectively by such small group discussions. Also, the center trains student volunteers as peer counselors. Members of the peer counseling group are available to students who prefer to confer with another student rather than with a professional.

The Student Counseling Center maintains strict standards of privacy and confidentiality. No information on individual students is released to anyone, inside or outside the university, without the informed consent of the student, nor do contacts with the center become a part of university records.

**Office of
Student Affairs**

The Rush University Office of Student Affairs works to provide an atmosphere which will enhance the students' academic experience. The student affairs staff works closely with students, faculty, and administration to identify areas of student need and to design and implement programs and policies to meet those needs. Special attempts are made to encourage university-wide activities which include students from all the colleges. Inquiries may be addressed to:

The Office of Student Affairs
Rush University
1743 West Harrison Street
Chicago, Illinois 60612
(312) 942-6302

Housing

Chicago and its adjoining suburbs, as well as the university, provide a wide variety of off-campus and on-campus housing options for Rush University students. The Office of Student Affairs publishes informational brochures which outline these residential opportunities.

Information regarding on-campus housing is sent to each applicant. Off-campus housing information may be obtained by contacting the Office of Student Affairs.

Schweppe-Sprague Hall, Kidston House, and McCormick House comprise the on-campus housing at Rush University. The individual units range from a limited number of single occupancy dormitory spaces to two-bedroom apartments which accommodate up to four students. When filled to capacity current on-campus facilities can house approximately 25 percent of the total student body.

Nine-month or 12-month rental agreements are available for on-campus housing. A lease will accompany each letter of acceptance into university housing. The lease, accompanied by a security deposit of one month's rent, must be signed and returned to the Office of Student Affairs within the time specified in the cover letter and lease. Failure to return the lease and the security deposit within the time specified will result in the loss of the housing assignment. All inquiries regarding housing assignments should be directed to the Office of Student Affairs.

Information regarding current availability of off-campus units, potential roommates, and car pools is also coordinated by the Office of Student Affairs. An off-campus housing bulletin board as well as current copies of local newspapers are also maintained to help students relocate.

Transportation and Parking

Public transportation to and from the Rush campus is readily available. The "Congress A" train from downtown Chicago and the western suburbs stops two and one-half blocks northwest of the campus at the "Medical Center" stop. The "Douglas B" train from downtown, stops at "Polk Street", at the southeast corner of the campus. Chicago Transit Authority buses also stop at the campus.

Students who commute by automobile may use the covered parking garage located directly across the street from the Academic Facility on Paulina Street. Prevailing parking rates apply.

The Medical Center also operates a shuttle bus to and from the Chicago Northwestern and Union train stations during the rush hours.

Social and Cultural Activities

Lake Michigan provides an ideal site for a variety of activities such as boating, fishing, bicycling along the lakeshore path, and sunning. During the winter months, ice skating and cross-country ski enthusiasts have access to Cook County's expansive parks and forest preserves.

Chicago's Loop, with its many opportunities in art, music, drama, films, and museums, is located approximately two miles from campus and is easily reached by public transportation. Outstanding attractions in Chicago include the Chicago Symphony Orchestra, the Lyric Opera, the Art Institute, the Museum of Science and Industry, the Field Museum of Natural History, the Shedd Aquarium and the Adler Planetarium.

The Office of Student Affairs works with the more than 1,000 students currently enrolled at Rush University to sponsor organized programs of a cultural, educational, recreational and social nature. The University Programing Board is an elected group of students from all colleges of the university who work with the Office of Student Affairs to plan and implement these programs. Programs have included: college bowl tournaments, films, ski trips, student dances and university nights at local cultural events.

Rush University students are able to use the physical education facilities at the University of Illinois Chicago Circle Campus. A nominal fee is charged. Students must present their Rush University I.D. cards in order to take advantage of the special student rate. Information regarding the fee structure and scheduling is available in the Office of Student Affairs.

Alumni Association of Rush Medical College

The Alumni Association is an active organization dedicated to supporting the educational goals of Rush Medical College. Purposes of the organization are: to maintain communications between alumni and the college; to honor alumni who have given distinguished service to the profession of medicine; to promote and encourage the highest standards of medical education; to assist the faculty and staff of the college in any way possible; and to provide financial support for the operation of Rush Medical College.

Prior to its reactivation in 1971, Rush Medical College conferred 10,976 M.D. degrees. The alumni and trustees of the college were responsible for keeping alive the original charter granted by the State of Illinois in 1837. The alumni also maintained the Rush Medical Library and made financial grants for postgraduate education during the college's inactive period. Rush alumni practice in all of the 50 United States and in 11 foreign countries.

The Alumni Association is represented on the Board of Trustees of Rush-Presbyterian-St. Luke's Medical Center by four alumni who are elected annually, one of whom is the President of the Alumni Association.

Course Descriptions

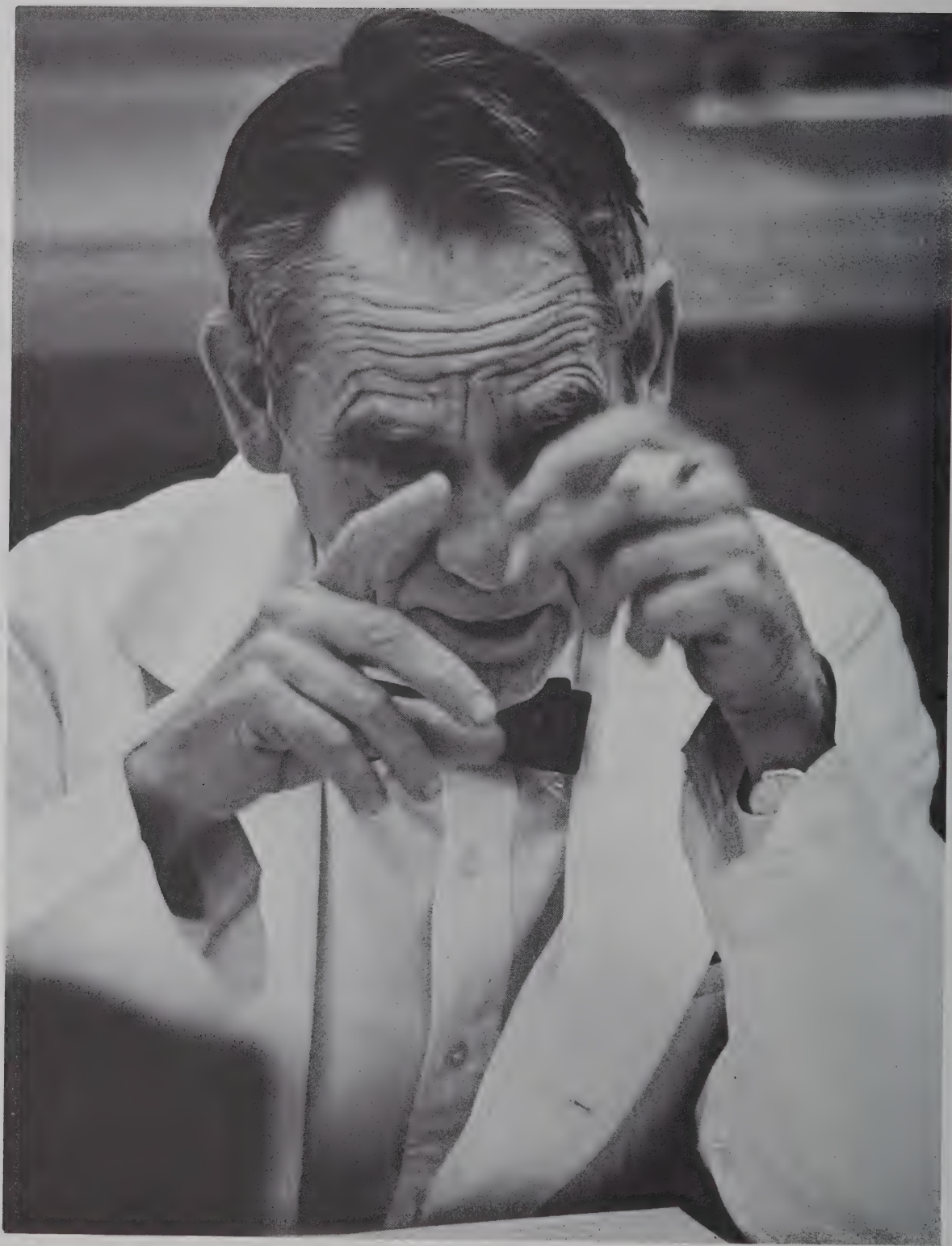
Courses listed and described in this section are Rush Medical College courses expected to be offered to students in the 1981-82 academic year.

Course Abbreviations

All Rush Medical College courses are listed alphabetically according to the discipline to which the course content is related. These disciplines do not necessarily reflect a department in the college or the Medical Center. The following list shows the disciplines and their abbreviations.

I. Behavioral Sciences	BEHAV
II. Biological Sciences	
Anatomy	ANAT
Biochemistry	BIOCH
Genetics	GENET
Immunology	IMMUN
Microbiology	MICRO
Pharmacology	PHARM
Physiology	PHYSO
III. Clinical Sciences	
Clinical Tutorial	CLTUT
Dermatology	DERM
Family Medicine	FAMED
Internal Medicine	INMED
Medical Physics	MDPHY
Neurological Sciences	NEURO
Obstetrics and Gynecology	OBGYN
Pathology	PATHO
Pediatrics	PEDS
Physical Medicine and Rehabilitation	PMEDR
Preventive Medicine	PRMED
Psychiatry	PSYCH
Surgery	SURGY
IV. Humanities	HUM

FA — Fall	WI — Winter	SP — Spring	SU — Summer
Requ — Required	Prerequ — Prerequisite		



Anatomy

ANAT 451

Histology. FA, Director: J. A. Colgan, Ph.D. An introduction to the use of the microscope. The microscopic anatomy of cells, tissues, and organ systems of the human body is studied through laboratories, lectures, and preceptorials in correspondence with Human Anatomy during the Fall Quarter. Special attention is given to the fine structural anatomy of cell organelles and individual specializations revealed by the electron microscope. Functional and clinical correlations are emphasized.

Requ: First Year; 72 hours.

ANAT 471

Human Anatomy I. FA. Director: A. J. Schmidt, Ph.D. The structure and function of the human body are examined topographically through laboratory dissection, lectures, and preceptorials. Laboratory dissection is conducted regionally, encompassing the thorax, abdomen, pelvis, perineum, head and neck, and extremities. Radiological anatomy, living anatomy, and clinical correlations are emphasized.

Requ: First Year; 90 hours.

ANAT 472

Human Anatomy II. WI. Director: A. J. Schmidt, Ph.D. Continuation of ANAT 471.

Requ: First Year; 90 hours.

ANAT 601

Surgical Anatomy. FA, SP. Director: A. Doolas, M.D. A laboratory program of regional dissections and demonstrations. The applied, clinical, and surgical aspects of anatomical topography are emphasized.

Prerequ: ANAT 472; Elective; 2-8 weeks.

Behavioral Sciences

BEHAV 451

Fundamentals of Behavior. WI. Director: P. Zeldow, Ph.D.; Coordinator: M. Counte, Ph.D. During the first five weeks, a series of lectures provide the basic conceptual framework and terminology that are used to describe and explain human behavior. It is divided into three sections: biological, psychological, and sociocultural. Primary emphasis throughout is on the ways such types of influences affect the lives of patients. During the second five weeks, a matrix of special topic seminars (mini-courses) is presented from which the student selects two. Each seminar allows a concentrated approach to a significant area of behavioral study.

Requ: First Year; 43 hours.

The special topic seminars associated with BEHAV 451 include the following:

Pain. David C. Garron, Ph.D. Pain is a common presenting symptom, and its alleviation is often a primary goal of treatment. At the same time, pain is often not obviously related to physical disease processes, and may be a complication of treatment. This course will discuss concepts of pain, factors affecting its report by patients, and its role in various disorders.

Obesity. John Mead, Ph.D. and Dorice A. Czajka-Narins, Ph.D. This course will cover the epidemiology, genetics, and social psychology of obesity. It will also cover the metabolic effects of obesity, factors influencing appetite regulation, and behavioral, dietary, and other approaches to treatment.

Behavioral Change Strategies in Medical Practice. Robert Zitter, Ph.D. The medical profession is becoming increasingly aware of the role that behavioral techniques play in both increasing the efficacy of medical procedures and ameliorating a wide array of physical complaints. This course will focus on the application of the behavioral model of assessment and intervention to medical problems. Topics will include multiple strategies to increase compliance with medical regimens, eg., pill-taking, weight loss, smoking cessation, etc. In addition, the utility of techniques such as relaxation therapy, systematic desensitization, biofeedback, cognitive-behavior modification, and, more generally, stress management in a medical setting will be examined.

Becoming a Physician. Kris Kjerulff, Ph.D. An opportunity to examine the process of becoming a physician will be presented. Topics to be covered will include socialization into the profession of medicine, the adjustments required of medical students, the psychologically impaired physician, and changes in medical education.

Psychology, Psychiatry, and the Law. Richard Rogers, Ph.D., Course Coordinators: Barbara Weiner, J.D.; James L. Cavanaugh, Jr., M.D. Mini-course developed to examine basic issues confronting mental health and the law. Its intent is to familiarize medical students with some of the complex and controversial issues in the application of psychology and psychiatry to the law as well as the impact of mental health on the legal system. The course will examine treatment and evaluative issues, the role of attorneys in the mental health system, patients' rights, and professional issues such as court testimony and malpractice.

Models of Health Care Delivery. Frederic Wolinsky, Ph.D. The purpose of this course is to provide students with an understanding of the various models of health care delivery in the United States. The traditional delivery model of the independent, fee-for-service, office-based physician will be compared and contrasted with a variety of alternative models, including partnerships, group practices, and health maintenance organizations. The impact of the constraining effects which result from the organizational characteristics of the various models on both physicians and patients will be examined, with special attention given to their importance for comprehensive health care and cost-containment.

Interpersonal Behavior and Health Care. Michael Counte, Ph.D. The focus of this course will be upon examining select social psychological dimensions of health care delivery. Included will be discussions of: (1) illness behavior of people prior to seeking assistance; (2) utilization of health care services; (3) compliance behavior or adherence to treatment regimens; and (4) attitude change techniques. Case materials will be used to supplement the didactic materials presented in the seminars.

Neural Basis of Learning and Memory. Leyla deToledo-Morrell, Ph.D. Examination of experimental approaches used to study the neural basis of learning and memory. Course will cover neurophysiological, biochemical, pharmacological and behavioral studies, and will range from the detailed analysis of simple behaviors in simple systems to complex learned behaviors in man. Where possible, principles discovered in the laboratory will be applied to the memory disorders encountered in clinical situations. Similarly, observations derived from the study of clinical disorders will be used to indicate their contribution to the understanding of memory mechanisms.

Sociology of the Hospital. Sue T. Hegyvary, Ph.D. A variety of topics will be covered in this course, including how organizational variables influence the quality of patient care; what dilemmas arise when one attempts to provide clinical services in a bureaucratic system; how external groups exert social control over hospitals; the role of the patient and his/her family in the social structure of the hospital, and what changes are occurring (e.g., Patients' Bill of Rights); and how social and organizational factors related to patient care can be modified to increase the quality of care provided.

Psychological Aspects of Medical Disease. Linas Bieliauskas, Ph.D. This course will examine the antecedent, consequent, and exacerbatory relationships of psychological factors to disease processes. Emphasis will be placed on a basic understanding of these relationships, ability to recognize the presence of the factors in patients, and guidelines on dealing with their influence. Included will be discussions of general principles as well as characteristics of specific disease entities.

Sleep, Normal and Abnormal. Rosalind D. Cartwright, Ph.D.; Laura Gordon, Ph.D.; Steve Weber, Ph.D. This course will provide a general introduction to the physiology and psychology of sleep. It will cover both normal sleep and dream patterns and the deviations which occur with various medical and psychiatric problems. It will also cover the diagnosis and treatment of the insomnias, hypersomnias, and abnormal behaviors associated with sleep (sleepwalking, talking, enuresis, and night terrors).

Alternative Modes of Healing. Jeffrey C. Salloway, Ph.D. Health Care has two dimensions: treatment and healing. A variety of modes of treatment are utilized by patients to promote healing. Traditional medicine is but one of these modes. The course will focus upon approaches to the facilitation of healing as practiced by such treatment modalities as osteopathy, chiropractic, spiritual healing, naprapathy, and reflexology, as well as traditional branches of medicine. Emphasis will be on the treater's view of the patient as a whole, etiology of disease, methods of intervention and their side-effects, utilization of the patient's own resources, and techniques to enlist the patient's own participation in the healing process. Presentations will be made by representatives of alternative modes of treatment.

BEHAV 453

Behavior in the Life Cycle. SP. Director: P. Zeldow, Ph.D. Introduction to a clinically based study of the individual life cycle. Emphasis is on the provision of a normative account of development from physical, psychological, and sociological perspectives. Lecture, discussion, and, during the second five weeks of the quarter, a matrix of special topic seminars (mini-courses).

Prerequ: BEHAV 451; Requ: First Year; 32 hours.

Special Topic seminars associated with BEHAV 453 include the following:

Psychology and Psychopathology of Aging. Jary Lesser, M.D. This course will focus on the normal and psychopathological processes of aging and the physician's role in the total health care of the elderly patient. Topics for discussion will include (1) normal psychology of the aging process; (2) interviewing techniques with elderly patients; (3) depression, paranoid syndromes, and organic brain syndromes in elderly patients; (4) psychological and psychopharmacological treatment approaches with elderly patients; and (5) family issues in geriatrics.

Parenthood and Child Abuse. David Anderson, Ph.D. Purpose is to sensitize the student to some of the basic emotional and practical issues of parenting, and to consider the circumstances under which parents come to abuse their children. The first section of the course will focus on topics such as emotional preparation for parenthood; influence of parental attitudes on the emotional life of the child and development of the family; normal stresses of parenting, and practical issues of parenting related to child management. Consideration will be given to unique situations encountered by single parents, stepparents, foster parents and grandparents. The second section of the course will be devoted to a discussion of the abusive parent with special attention to questions of why some parents abuse their children and how health-care professionals can work with these parents.

Family Assessment. Katherine Lofgren, M.S.W. This course provides the student with a knowledge base from which to make family assessments. The family systems approach illustrated in BEHAV 453, selected readings, and videotapes of family interviews will all be utilized to acquaint the student with the family as an object of study, assessment, and treatment. The role of the family in the assessment and treatment of mental and psychosomatic disorders will also be discussed.

Behavioral Pediatrics. Paul Driscoll, M.Ed. This course will focus on typical behavioral problems of the pre-school (2-4) and early school age (5-8) child which are seen by pediatricians and family practitioners. It is designed to assist in the understanding and treatment of areas such as enuresis and encopresis; feeding difficulties; discipline; reactions to separations (hospitalization, day care); and school-related difficulties.

Psychophysiology of Normal and Abnormal Infants. Michael Nelson, Ph.D. The close interrelationship between processes of biological and behavioral development during the first two years is explored in depth. The developing response capabilities and behavioral milestones of normal infants are used to define aberrant psychophysiological processes in high-risk and brain-damaged infants. Effects of premature birth and perinatal anoxia and hypoxia are emphasized in the context of the special problems of parenting sick or behaviorally abnormal infants. The response deficiencies of high-risk or abnormal infants are contrasted with the behavioral patterns of mentally retarded and learning disabled children.

Sexual Medicine and Office Practice. Marguerite Rebesco, Ph.D. In this course, students will learn to recognize and manage the sexual concerns of medical patients that arise as a function of developmental change and/or physical disease. Topics addressed include: sex and the growing child, counseling aspects of family planning, sexuality and physical illness, aging and sexual functioning, and disorders of sexual function and sexual desire. Extensive reading and discussion will allow students to become familiar with both common sexual questions and the manner in which such questions are often posed. Students will develop skills as facilitators in discussion of such concerns. Office management strategies and referral sources appropriate to the practice of sexual medicine will be identified.

Adolescent Pregnancy. Dolores Exum, M.S.W. The purpose of this course is to help the student develop a knowledge base regarding the cultural, socioeconomic, emotional, and psychological aspects of adolescent pregnancy. The course format will include seminar, lecture, and discussion on topics such as 1) the incidence and prevalence of adolescent pregnancies and implications for the health provider; 2) influence of value systems and stereotypic thinking in relation to adolescence; 3) the pregnant adolescent; 4) prevention and anticipatory guidance, abortion and family planning; and 5) the role of the family of the pregnant adolescent.



Human Sexuality and Health Care. Francois E. Alouf, M.D. As with other areas of health care, public expectations for better sexual health have increasingly pushed the medical profession to deliver more comprehensive care. Sexual problems are to be found routinely among the patients in physicians' offices. Very often those patients will first seek medical consultation. This course will review several aspects of human sexuality including the human sexual responses in the male and female, gender role development in men and women, taking a sex history in clinical practice, sex and medical illness, and basic aspects of sex therapy in general practice. Through the use of videotapes, films, slides, assigned readings and discussion, this seminar will attempt to help the physician provide better care to those patients who either present themselves with sexual problems or in whom sexual difficulties are uncovered.

Living and Dying. Rev. George Fitchett, D. Min. Students in this course will (1) become familiar with the significant literature in the field of thanatology, particularly that which deals with the psycho-social care of the dying patient; (2) reflect on their own personal feelings and experiences related to death and loss and the ways in which they might influence clinical practice; and (3) under supervision, conduct an interview with a patient with a life-threatening illness and reflect upon this interview in light of their understanding of themselves and the knowledge base in the field.

BEHAV 541

Observation and Communication I. WI. Director: P. Zeldow, Ph.D.; Coordinator: F. Leavitt, Ph.D. Introduction to the interview technique and process—the interview as a tool that facilitates the doctor-patient relationship and produces reliable and valid medical information. Interview theory, determinants of patient behavior, and practice of interview skills are included. Seminars utilize videotapes. Prerequ: BEHAV 451; Requ: Second Year; 20 hours.

Biochemistry

BIOCH 461

Biochemistry I (Basic concepts). FA. Director: A. Bezkorovainy, Ph.D. The chemistry of amino acids, peptides and proteins; blood proteins; metabolism of metalloelements; bioenergetics; enzymes, co-enzymes and cofactors are studied in lectures and optional tutorials. Requ: First Year; 40 hours.

BIOCH 462

Biochemistry II (Intermediary metabolism). WI. Director: A. Bezkorovainy, Ph.D. The chemistry and metabolism of carbohydrates and lipids; metabolism of proteins and amino acids; the chemistry and metabolism of nucleotides and nucleic acids and the genetic code are studied in lectures and optional tutorials. Requ: First Year; 38 hours.

BIOCH 463

Biochemistry III (Systems and organ biochemistry). SP. Director: A. Bezkorovainy, Ph.D. Biochemistry of connective tissue, muscle tissue, and adipose tissue; clinical nutrition; and fluid, acid-base, and electrolyte regulation in the human being are studied in lectures and optional tutorials. Requ: First Year; 33 hours.

BIOCH 531, 532

Advanced Medical Biochemistry I and II. WI, SP. Director: A. Bezkorovainy, Ph.D. Designed for first-year medical students who are excused from Biochemistry 461, 462 and 463 on the basis of demonstrated proficiency. Contents: application of biochemical principles to the analysis of tissue function and diseases. 60 hrs. (30 hours each quarter)

BIOCH 590

Special Topics in Medical Biochemistry. (Quarter by arrangement.) Director: C.G.D. Morley, Ph.D. Topics to be arranged according to students' interest, covering such topics as platelets and endothelial cell biology, biochemistry of cancer, biochemistry of metals, clinical enzymology, connective tissue biochemistry, or practical work in the clinical biochemistry laboratory.
Prerequ: BIOCH 461-463. Elective; duration variable.

Clinical Concepts and Skills

CLTUT 511, 512

Clinical Concepts and Skills, WI, SP. Director: J. Graettinger, M.D., Associate Director: E. Brueschke, M.D. The student is given a comprehensive introduction to clinical medicine, utilizing the resources of the Medical Center and the Rush network hospitals. Studies are primarily tutorial, but texts, audiovisual, and mechanical aids are available for self-study. Initially, students work with instructors and peers learning to elicit a history and do a general screening examination. This is followed by extensive experience working with patients under the supervision of practicing physicians, with emphasis on eliciting historical information and gaining experience in physical examination techniques. Demonstration of pathological abnormalities and clinical pathological correlations are emphasized.
Requ: Second Year; 110 hours.

Dermatology

DERM 616

Dermatology. SU, FA, WI, SP. Director: F. Malkinson, M.D., D.M.D. Students participate fully in all of the clinical and teaching activities of the Department of Dermatology, and are responsible for initial evaluation of outpatients and inpatients and inpatient consultations. Dermatologic problems are studied under the direct supervision of the departmental staff; diseases are considered from the standpoint of etiology, pathogenesis, diagnosis, course, and treatment. Skin biopsy applications and techniques as well as histopathologic interpretation are emphasized. Skin therapeutics are taught, stressing biochemical and physiological considerations.
Prerequ: INMED 503; Elective; 4 weeks.

Family Medicine

FAMED 601

Family Practice. SU, FA, WI, SP. Director: T. Dent, M.D. The objectives of the family practice clerkship are as follows: acquisition of: (1) knowledge and skill in recognizing and dealing with the common physical and behavioral health problems encountered in a broadly-based primary care practice; (2) an understanding of the use of consultants, subspecialists, and specialized diagnostic and therapeutic resources by the family physician; (3) an understanding of available community resources to meet the needs of patients; and (4) understanding of and experience with the management aspects of ambulatory medical care. To accomplish these objectives, the student will spend four weeks in an approved Model Family Practice Center and return to Rush Medical College one-half day per week for didactic lectures. The student will work as a colleague with the family practice faculty members, and residents, including such activities as the office, hospital, nursing home, emergency calls, and home visits.
Requ: Third or Fourth Year; 4 weeks.

FAMED 602

Advanced Family Practice. SU, FA, WI, SP. Director: E.E. Brueschke, M.D. The purpose of this rotation is to provide the student with an intensive ambulatory care experience at one of the Rush Medical College Family Practice Centers. The student will have primary responsibility for evaluating and managing the diverse problems encountered in a family practice setting. A minimum of 20 hours per week will be spent in the family practice center, working with senior family practice residents and faculty.
Prerequ: FAMED 601; Elective; 6 weeks.

FAMED 621

Emergency Room—Christ Hospital. SU, FA, WI, SP. Director: P. Fried, M.D. This rotation allows students to work in a large emergency room under the direction of emergency room residents and faculty. The objective of this course is to expose the student to the full gamut of clinical problems encountered in the emergency room. Through the evaluation and management of these problems, the student should develop some of the skills necessary for working within this increasingly important area.
Prerequ: FAMED 601; INMED 601; SURGY 601 for third-year students; none for fourth-year students; Elective; 4 weeks.

FAMED 623

Stress and Illness in the Ambulatory Setting. SU, FA, WI, SP. Director: R. Zitter, Ph.D. The objective of this rotation is to increase the student's understanding of the complex relationship between stress, psychological conflict, family support, and the clinical presentation of the patient in the physician's office. The predominant activity during this elective is evaluating a wide variety of family practice patients from a psychosocial perspective. This will be done under the supervision of the Christ Hospital Family Practice psychologist. Students will also participate in counseling sessions and observe counseling techniques. A comprehensive list of readings will be a requirement of the course, and weekly seminars will be scheduled on this material. The student will select one area for further study (e.g., increasing compliance with medication), and write a short paper on this topic.

Prerequ: FAMED 601, PSYCH 601; Elective; 4 weeks.

FAMED 625

Alcoholism Rotation—Christ Hospital. SU, FA, WI, SP. Director: C. Range, M.D. Co-Director: K. Sherin, M.D. This elective is designed to provide the student with greater knowledge and expertise in diagnosing and managing alcoholism. The student will work in the Alcoholism Detoxification Center and Alcoholism Rehabilitation Center at Christ Hospital. There will be opportunity to follow-up patients in the out-patient aftercare program. He/she will be responsible for managing the medical and emotional problems of the patients from these units under the supervision of family practice residents and attendings. The student will also partake in the daily individual treatment, in weekly Alcoholics Anonymous meetings, and family counseling sessions. No call is expected, but the student will be required to work late two nights per week. A required reading list and bibliography as well as slide packages and teaching films will be provided.

Prerequ: FAMED 601; INMED 601; PSYCH 601; Elective; 4 weeks.

FAMED 641

Urban/Primary Care—Woodlawn Setting. SU, FA, WI, SP. Director: J. Froilind, M.D. This rotation is a preceptorship with an experienced family physician who practices in an inner city area. The student taking this elective will work with Dr. Froilind and experience what a physician's community orientation and practice are like in this physician shortage area.

Prerequ: FAMED 601; Elective; 4 weeks.

FAMED 642

Community Medicine—Stickney Clinic. SU, FA, WI, SP. Director: A. Largosa, M.D. Stickney Clinic is a community funded health clinic, serving the primary care needs of Stickney, Illinois (a suburb west of Chicago). Students taking this rotation will evaluate and manage patients in this broad-based ambulatory care experience providing care to an underserved patient population.

Prerequ: FAMED 601; Elective; 4 weeks.

FAMED 643

Community Medicine—ANCHOR HMO. SU, FA, WI, SP. Director: M. Lang, M.D. The objectives of this rotation are (1) the ability to form a comprehensive physical examination under the supervision of a family physician, and to establish an optimum treatment approach that includes a discussion of lifestyle changes with the patient; (2) to develop an understanding of family practice and its special relationship to health maintenance organizations; (3) to observe several unique aspects of a voluntary, pre-paid health care organization including observation of its utilization review system and the handling of patient problems; (4) to observe and participate in a group health education seminar.

Prerequ: FAMED 601; Elective; 4 weeks.

FAMED 644

Wholistic Health Care Center. SU, FA, WI, SP. Oak Lawn Director: C. Lopez, M.D. Oak Park Director: S. Humowiecki, M.D. The objectives of this rotation are to: first, demonstrate how a health care team may function in the ambulatory care area; and second, have students participate in the health care of patients, encompassing medical, psychological, and spiritual issues. The health care team of the Wholistic Center consists of physicians, nurses, and a minister. These individuals work together to formulate the goals and strategies for therapy of Wholistic Center patients.

Prerequ: FAMED 601; Elective; 4 weeks.

FAMED 645

Suburban Private Practice—Oak Lawn. SU, FA, WI, SP. Director: M. Shobris, M.D. This rotation is a preceptorship conducted under an experienced family physician who has a suburban Chicago practice. The student taking this course will be allowed to work with Dr. Shobris in all aspects of his medical practice. In addition to inpatient and outpatient care duties, there will be exposure to the other hospital and office responsibilities of a busy family physician.

Prerequ: FAMED 601; Elective; 4 weeks.

FAMED 651

Rural Primary Care—Streator. SU, FA, WI, SP. Director: G. Gottemoller, M.D. This rotation is a preceptorship with an experienced family physician practicing in Streator, Illinois. Streator is a small town (population 15,000) located 90 miles southwest of Chicago. The student will experience what a family physician's practice and role within the community are in this rural setting.

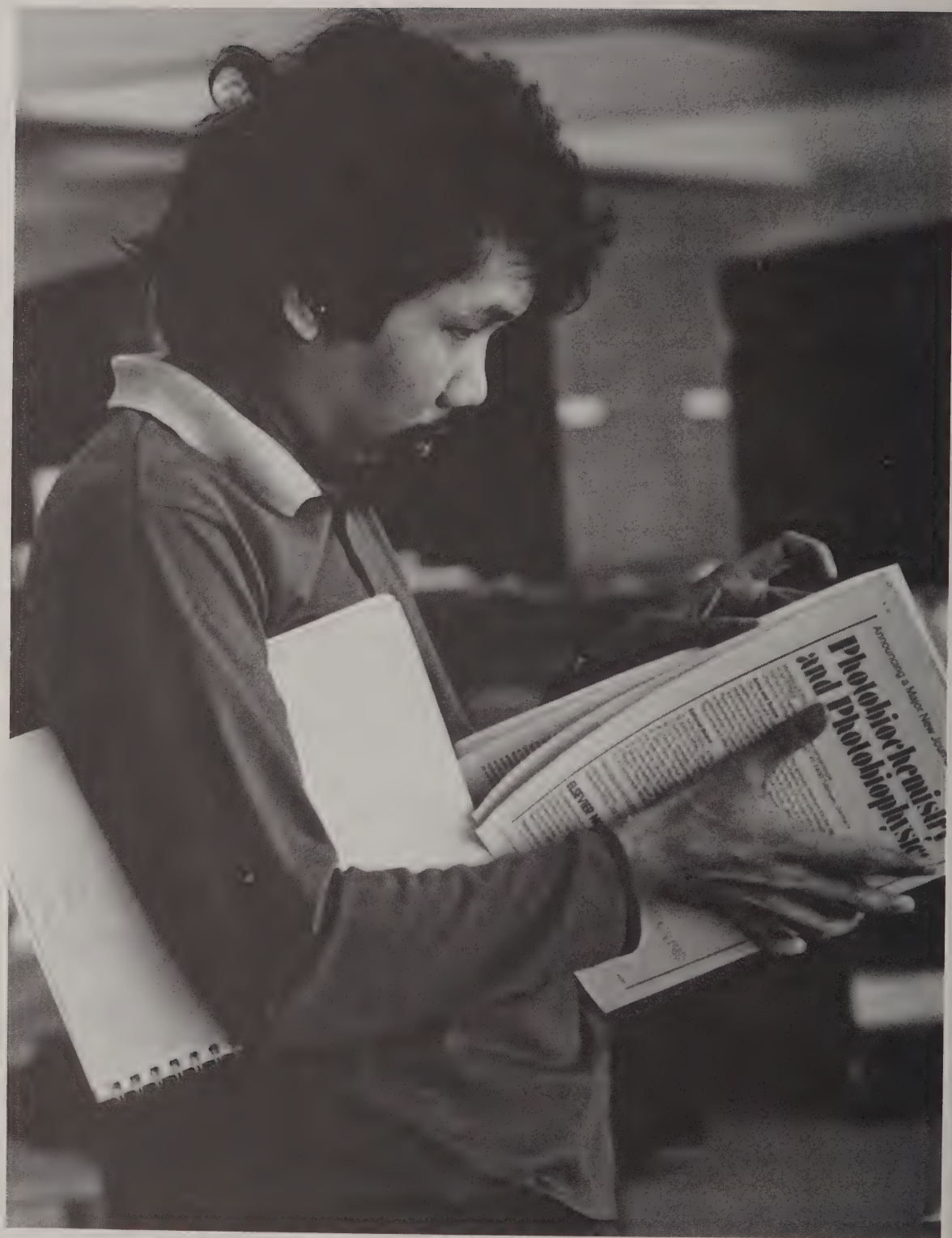
Prerequ: FAMED 601; INMED 601; PEDS 601; OBGYN 601; Elective; 4 weeks.

FAMED 652

Rural Primary Care—Galesburg. WI. Director: R. Currie, M.D. This rotation is a preceptorship with a group of family physicians practicing in Galesburg, Illinois. Galesburg is located 250 miles west of Chicago. Prerequ: FAMED 601; INMED 601; PEDS 601; OBGYN 601; Elective; 4 weeks.

FAMED 653

Primary Care—College Health Service. FA, WI, SP. Director: J. Devitt, M.D. This rotation is a preceptorship with Dr. Devitt at the Illinois State University Student Health Service at Normal, Illinois. The emphasis of this course will be on the medical and psychosocial problems of young adults. Prerequ: FAMED 601; Elective; 4 weeks.



FAMED 661

Combined Family Practice/Psychiatry. SU, FA, WI, SP. Co-Directors: T. Dent, M.D., R. Zadylak, M.D. The purpose of this elective is to provide students with greater skills and experience in interviewing and assessing ambulatory patients; particular emphasis will be placed on crisis intervention and supportive psychotherapy in the context of what a family physician might handle in his/her office. The student will spend four days per week in the Christ Hospital Family Practice Center with extensive videotaping of the patient/student encounters. These videotapes will be assessed both at Christ and at Rush where the student will return one day per week for a lecture series and supervised interviews under the auspices of Rush Medical College psychiatry faculty. Rush psychiatrists will also come to the Christ Hospital Family Practice Center to further assist in the teaching of the elective students.

Prerequ: FAMED 601; PSYCH 601; Elective; 4 weeks.

Genetics

GENET 601

Medical Genetics. FA, WI, SP. Director: P. Wong, M.D. Diagnostic, therapeutic counseling, and laboratory experience are provided through direct contact with patients and laboratory facilities.

Prerequ: INMED 601, PEDS 601; Elective; 8 weeks.

Humanities

Rush Medical College offers a three-sequence course in the Humanities. This elective seminar series invites students to bring an open and inquiring mind to bear on problems of medicine as expressed in some of the world's outstanding literature. Sequences may be applied toward meeting the mini-course components of Behavioral Science 451 or 453.

HUM 461

Physician as Writer. FA. Directors: D. Vidaver, M.A. and M. Cohen, M.D., Ph.D. The course will explore in detail selected fiction, chronicles, and autobiographies by distinguished 20th century physician-writers. Focus will be on the writer's unique response to questions of medical ethics, social issues, and doctor-patient relationships, as well as on the physician as philosopher and humorist. Works by William C. Williams, Anton Chekhov, Oliver Gogarty, Carlo Levi, and Mariano Azuela will be included.

Elective; 20 hours.

HUM 462

Physician as Literary Character. WI. Directors: D. Vidaver, M.A. and M. Cohen, M.D., Ph.D. An investigation of important 19th and 20th-century plays and fiction which feature the doctor as a major character. Emphasis will be on the doctor as object of social satire; as an individual in crises concerned with problems of lifestyle and medical practice; and as representative of science in the conflict between "the two cultures." Works included are by G. B. Shaw, Eugene O'Neill, Friedrich Durrenmatt, Tennessee Williams, Henrik Ibsen, and Sinclair Lewis.

Elective; 20 hours.

HUM 463

Disease as Subject in Contemporary Literature. SP. Directors: D. Vidaver, M.A. and M. Cohen, M.D., Ph.D. This sequence examines the depiction of disease in outstanding fiction and poetry, as well as in the memoirs, journals, and personal narrations of some distinguished contemporary writers who faced disease and analyzed their experiences with acute perception. Included will be works by Andre Gide, John Updike, Thomas Mann, Tillie Olsen, Katherine Ann Porter, Albert Camus, and John Berryman.
Elective; 20 hours.

Immunology

IMMUN 501

Immunology. FA. Director: B. Hansen, Ph.D. The student is given an introduction to immunology, with emphasis on basic concepts and principles, followed by study of clinical applications. Topics include antibody structure; antigen-antibody reactions; genetic and cellular control of antibody synthesis; the complement system; phagocytosis, inflammation and nonspecific immunity; immediate and delayed hypersensitivity; cellular immunity; transplantation immunology and immunogenetics; immune deficiency disease; and autoimmune processes and rheumatology. A three-hour demonstration laboratory is presented in which the student can become familiar with the procedures used in the clinical immunology laboratory. The clinical emphasis is maintained through patient evaluation and the use of the clinical laboratory in studying individual problems.
Requ: Second Year; 52 hours.

Internal Medicine

INMED 501, 502, 503

Clinical Pathophysiology I, II, and III. FA, WI, SP. Director: P. R. Liebson, M.D. This course serves as a bridge between the basic sciences and clinical medicine. Its purpose is to make the student conversant with the limits of biochemical and physiologic responses under a variety of stresses and disease states. The course emphasizes three basic areas: (1) Abnormal general cellular biology: infections, immunology; (2) Homeostasis: abnormalities of acid-base balance, fluid-electrolyte balance, intermediary metabolism, nutrition, endocrine, growth-development and aging; (3) Organ system pathophysiology: cardiovascular, pulmonary, urinary tract, gastrointestinal, hepatic, hematopoietic, lymphatic, cutaneous, rheumatology, and locomotor. The course closely coordinates with topics in the pathology course to allow the student to apply knowledge developed in that discipline. It also is coordinated with didactic material to be presented during the third-year clinical program. Course format will involve lectures, workshops and conferences. Course evaluation of student performance will be based upon written examinations, a required essay, and student participation during lectures and conferences.
Requ: Second Year; 240 hours.

INMED 601

Clerkship in Internal Medicine. SU, FA, WI, SP. Director: J. Schaffner, M.D. The medicine clerkship is designed to provide the student with experience in basic clinical skills and knowledge of internal medicine, and to provide a supervised program of instruction in all modes of medical care. It is a total departmental function in cooperation with the house staff and attending faculty. Each student is expected to participate in all floor functions and do extensive investigation of clinical problems assigned.

Prerequ: CLTUT 512; Requ: Third or Fourth Year; 12 weeks.

INMED 602

Advanced Internal Medicine. SU, FA, WI, SP. Director: T. Schwartz, M.D. This is intended for students who have successfully completed the clerkship in medicine. Students function at an advanced level, doing histories and physical examinations, diagnostic evaluations, and initiation of appropriate therapy. There is close supervision by the staff of the Department of Internal Medicine as well as a senior staff member of the parent hospital. The course is primarily intended for students desiring additional clinical experience in internal medicine.

Prerequ: INMED 601; Elective; 8 weeks.

INMED 605

Geriatric Medicine. SU, FA, WI, SP. Director: Robert M. Kark, M.D. The student will assume the role of a "subintern" under the direct supervision of a senior resident in medicine and course director on the Acute Geriatric Ward, 5 South (Johnston R. Bowman Health Center). The experience will serve as an introduction to Geriatric Internal Medicine. More than the usual initiative and responsibility is expected on the part of the student. Case write-ups in the traditional format are used; patient assignments will be made through the supervising resident. Scheduled ward rounds and formal and informal conferences are an integral part of the experience. Students will be provided board and room when on night call.

Prerequ: INMED 601; Elective; 4-8 weeks.

INMED 611

Clinical Cardiovascular Medicine. SU, FA, WI, SP. Director: J. Messer, M.D. At Rush-Presbyterian-St. Luke's, clinical experience provides the study of the diagnostic spectrum of cardiac evaluation including bedside assessment, electrocardiography, vectorcardiography, phonocardiography, ultrasound, cardiac catheterization, coronary angiography, and exercise testing. Patient study is carried out under the direction of the clinical staff. Regular staff conferences are concerned with clinical problems. The theoretical and practical aspects of electrocardiography are presented. At network hospitals, experience in bedside diagnostic and non-invasive evaluation is emphasized. Experience in the coronary care facility at each hospital enhances the acquisition of knowledge of electrocardiographic interpretation. Cardiac catheterization is available at some network hospitals. Students may elect the clerkship at Presbyterian-St. Luke's Hospital or at a network hospital. Assignments will be made according to preference in the order received. Students should indicate first, second, and third preferences.

Prerequ: INMED 601; Elective; 8 weeks.

INMED 612

Medical Intensive Care. SU, FA, WI, SP. Director: M.A. Codini, M.D., Assistant Director: N. Ruggie, M.D. This course provides experience in the recognition and management of medical emergencies, particularly the use of temporary pacemakers, bedside hemodynamic monitoring, use of respirators, and management of renal emergencies and cardiac arrhythmias. Patient study is carried out under the direction of the clinical staff. Regular staff conferences are concerned with clinical problems.

Prerequ: INMED 601; Elective; 4 weeks.

INMED 613

Introduction to Cardiovascular Research. SU, FA, WI, SP. Directors: J. Messer, M.D. The student's program is individually planned, with emphasis on understanding basic research techniques rather than the accomplishment of a specific research project. Students participate in the research program of the Section of Cardiology, including projects in human hemodynamics, cardiogenic shock, non-invasive studies, myocardial metabolism, cardiovascular electronics, and computer applications.

Prerequ: INMED 601; Elective; 8-12 weeks.

INMED 615

Emergency Medicine. SU, FA, WI, SP. Directors: E. Hudson, M.D., M. Tobin, M.D. The student assists in the evaluation and management of acutely ill adult patients. A combined elective including pediatric patients can be negotiated.

Prerequ: INMED 601, SURGY 601; Elective; 4 weeks.

INMED 616

Primary Care Medicine. SU, FA, WI, SP. Directors: E. Hudson, M.D., C. Kessler, M.D. The objectives are to provide the student a preceptor/trainee experience in an academic general internal medicine office practice, and to acquaint the student with a team approach to health care delivery, utilizing attending physicians, medicine residents, and nurse practitioners. The student will also participate in hospital rounds, and home health visits can be arranged through the Department of Community Health Nursing.

Prerequ: CLTUT 512; Elective; 4-8 weeks.

INMED 621

Clinical Endocrinology and Metabolism. SU, FA, WI, SP. Director: W. Ryan, M.D. Endocrine and metabolic disorders are studied under the direction of the clinical faculty. Students are assigned patients for work-up and presentation to the faculty. The student also participates in the diagnostic evaluation and the collection and correlation of laboratory data. Independent projects and laboratory work are optional. Regular departmental conferences and seminars supplement clinical work, which is primarily with hospitalized patients.

Prerequ: INMED 503; Elective; 4-8 weeks.

INMED 626

Clinical Nephrology. SU, FA, WI, SP. Director: E. Lewis, M.D. The clinical diagnosis and management of patients with renal disease as well as various fluid, acid-base, and electrolyte abnormalities are studied. In addition, the course is directed toward the proper interpretation of pathophysiologic findings and the practical clinical management of various disorders involving the excretory system and body fluids. Conferences and seminars are used to discuss patient problems and to help develop a broad, comprehensive understanding of the care of patients with renal disease.

Prerequ: INMED 601; Elective; 6-8 weeks.

INMED 631

Clinical Gastroenterology. SU, FA, WI, SP. Director: J. Franklin, M.D. Clinical gastroenterology is approached by the case study method. In addition, the methods of clinical gastroenterology, gastroscopies, colonoscopies, small-bowel biopsies, liver biopsies, esophageal motility studies, and proctoscopy are performed with the clinical section. Students extensively review the literature on subjects related to single cases seen during the course of the rotation.

Prerequ: INMED 601; Elective; 6 weeks.

INMED 636

Clinical Hematology. SU, FA, WI, SP. Director: J. Weens, M.D. This course emphasizes clinical diagnostic hematology. Students participate with the members of the section in the study of patients. Regular review of case studies with the faculty provides the basis for in-depth studies, particularly through study of bone marrows, and other diagnostic facilities of the laboratory. There are regular sectional conferences. Extensive library facilities and audiovisual aids are available.

Prerequ: INMED 503; Elective; 4-6 weeks.

INMED 646

Clinical Infectious Disease. SU, FA, WI, SP. Director: S. Levin, M.D. Students are expected to master basic principles of diagnosis and management of patients with infections. Appropriate use of diagnostic microbiology, differential diagnosis of febrile patients and appropriate selection of chemotherapeutic agents are taught during case presentations on daily rounds. A weekly three-hour clinical and research conference is held.

Prerequ: INMED 601; Elective; 4 weeks.

INMED 651

Clinical Rheumatology. Director: J. V. Jones, M.B. Ch. The student studies a variety of patients with rheumatologic and arthritic disorders. Emphasis is on the fundamentals of joint examination, observation and performance of laboratory examinations on synovial fluid, and familiarity with the spectrum of laboratory procedures useful in rheumatologic diagnosis and treatment. The interdisciplinary approach relies heavily on contributions of immunology, orthopedics, diagnostic radiology, physiotherapy, and occupational therapy. In addition to hospitalized patients, experience is offered in the care of ambulatory patients.

Prerequ: INMED 601; Elective; 4 weeks.



INMED 661

Clinical Oncology. SU, FA, WI, SP. Directors: J. Wolter, M.D., F. Hendrickson, M.D., S. Economou, M.D. Patients seen by the Section of Medical Oncology provide an ample and varied spectrum of oncological problems. Students study selected patients under the direction of members of the section. Various therapeutic approaches and complications occurring in the course of the disease are discussed. New patients are discussed at biweekly section meetings. The program stresses the importance of the combined interdisciplinary approach, using the resources of the departments of surgery and therapeutic radiology, as well as those of pathology and nuclear medicine. The weekly tumor conference, lymphoma conference, and gynecologic tumor conference are examples of such a multidisciplinary approach. Prerequ: INMED 601; Elective; 4 weeks.

INMED 671

Clinical Pulmonary Medicine. SU, FA, WI, SP. Director: R. W. Carton, M.D. The management of patients with pulmonary disease provides the focus for the study of clinical management, interpretation and use of pulmonary function and ventilatory studies, and gas management. The essentials of pulmonary physiology are emphasized. Prerequ: INMED 601, SURGY 601; Elective; 4 weeks.

INMED 676

Clinical Hepatology. SU, FA, WI, SP. Director: J. Payne, M.D. Students will participate in the Hepatology Service rounds, presenting case histories, assisting in the performance of liver biopsies, and observing a variety of endoscopic procedures. Pertinent liver biopsy material will be reviewed in clinical context. Formal and informal conferences are an integral part of the experience. Arrangements can be made to participate in ongoing research projects. Prerequ: INMED 601; Elective; 4-8 weeks.

Medical Physics

MDPHY 501

Radiation Physics, SU, FA, WI, SP. Director: D. Jette, Ph.D. Classical and quantum-mechanical theories of inelastic collisions with atomic electrons, energy loss per ion pair by primary and secondary ionization, Cerenkov radiation, single, plural, and multiple scattering of electrons by nuclei and atoms, radiative collision of electrons with atomic nuclei including the theory of bremsstrahlung, path length and range of electrons, range-energy relations for electrons, thick-target bremsstrahlung, passage of heavy charged particles through matter, interaction of electromagnetic radiations with matter, Klein-Nishina cross sections, angular and energy distribution of Compton scattering, photoelectric effect, pair production, attenuation, absorption, multiple scattering of photons, production and absorption of neutrons. Elective: 24 lecture hours.

MDPHY 503

Introduction to Computers in Medicine, SU, FA, WI, SP. Director: T. Wachtor and Staff. Basic components and history, analog and digital types of computers, binary and octal number systems, relay and transistor switches, gate; basic hardware structure of a computer including control, storage, input and output devices; interaction of CPU and core memory, program, language; basic software structure of a computer including operating system, compilers and assemblers, utility programs, user programs; introduction to "Basic" and "Fortran"; real time applications.

Elective: 24 lecture hours, 15 laboratory hours.

MDPHY 601

Radiological Physics, SU, FA, WI, SP. Director. L.H. Lanzl, Ph.D. Ionization radiation, stochastic and non-stochastic quantities; radiometry, including radiant energy, flux, fluence, radiance; interactions including attenuation and absorption coefficients, and mass-energy transfer and absorption coefficients; dosimetry including rigorous definitions of energy imparted, absorbed dose, kerma, exposure, dose equivalent, and absorbed-dose index. Ion collection, initial and general recombination in gases for parallel-plate, cylindrical, and spherical geometries for continuous and pulsed radiation with fixed and variable collection potentials. Special types of chambers: free-air, cavity, electron collection, condenser, and extrapolation, National radiation standards and world network of primary and secondary dosimetry laboratories; design and operation, and output of various accelerators, cyclotrons, synchrotrons, van de Graaff, and microtrons. Liquid-dielectric ionization chambers and ion recombination in liquid. Dosimetry systems used in therapeutic radiology and radiobiology.

Prerequ: MDPHY 501; Elective: 24 lecture hours.

MDPHY 602

Physics of Diagnostic Radiology, SU, FA, WI, SP. Director: (unassigned) X-ray generators, recording systems, H & D curves, transfer function analysis, noise analysis, measurements of MTF of screen-film systems, x-ray tube focal spot and geometric unsharpness, scattered radiation and grids, radiographic mottle, fluoroscopy and image intensifier—TV system, tomography, magnification technique, stereoscopy, ROC analysis, computed tomography, ultrasound, Monte Carlo simulation, x-ray spectral analysis, high-resolution bone radiography.

Prerequ: RADIO 601; Elective: 24 lecture hours.

MDPHY 603 *Radiation Protection*, SU, FA, WI, SP. Directors: A. Chung-Bin, M.S.C., L.H. Lanzl, Ph.D., M. Rozenfeld, Ph.D.; J. Majewski. Exposure from internal radiation sources, maximum permissible levels, protection from radioradioactive contamination, dose from beta particles, technical approaches for minimizing the dose, measurers for reducing patient dose, shielding x-ray beams, relationship involving both radioactive decay and biological elimination, calculation of absorbed dose from gamma emitters, dose to targets outside the source volume, authorization to use radioisotopes, responsibilities of users, standards for radiation exposure, personnel monitoring, airborne contamination limits, posting of areas, protective clothing, handling tools, storage of radionuclides and waste, waste disposal including gases, liquids and solids, transportation of radionuclides, leak tests of sealed sources, notification of authorities, formulation of standards for radiation protection, medical findings on individuals exposed to radiation, sources producing population exposure, federal and state regulations.
Prerequ: MDPHY 501 or 601 or 603; Elective: 24 lecture hours.

MDPHY 604 *Topics in Radiation Dosimetry*, SU, FA, WI, SP. Directors: L.H. Lanzl, Ph.D. and M. Rozenfeld, Ph.D. Track-etching phenomena including damage mechanism, latent track stability, track counting; registration of fission fragments, alpha particles, and recoil nuclei; neutron dose and spectra determinations; wall-less detectors in microdosimetry; dosimetry of low-energy x-rays; Katz and Kelleher-Rossi theories of the structure of particle tracks; thermoluminescence and radiophotoluminescence applied to dosimetry.
Prerequ: NONE; Elective: variable.

MDPHY 681 *Introduction to Research*, SU, FA, WI, SP. Directors: L.H. Lanzl, Ph.D., A. Chung-Bin, M.S.C., P. Kartha, Ph.D., M. Rozenfeld, Ph.D., and D. Jette, Ph.D. The student will undertake directed projects with a faculty member as an introduction to research.
Prerequ: MDPHY 501; Elective: variable.

Microbiology

MICRO 451 *Microbiology Concepts*. SP. Director: E. Schuytema, Ph.D. The course is designed to acquaint students with the basic morphological and physiological characteristics of infectious agents. Emphasis is placed on organisms of importance in human disease. General classification of infectious agents, the mechanisms by which these organisms contribute to disease states, and laboratory identification are emphasized. Demonstrations and laboratory work accompany the lecture portion of the course.
Requ: First Year; 60 hours.

MICRO 601

Clinical Bacteriology. SU, FA, WI, SP. Director: W. Landau, Ph.D. The experience provides rotation in each section of the diagnostic bacteriology laboratory, with emphasis on laboratory identification of pathogenic bacteria and normal flora. Experience is also provided in the techniques applicable to office diagnostic bacteriology. Clinical work is provided by arrangement with the infectious disease section. Specimens from patients provide data for learning clinical microbiology. Laboratory projects are available for students wishing to pursue individual interests.

Prerequ: MICRO 451, INMED 503; Elective; duration variable.

MICRO 602

Diagnostic Virology. SU, FA, WI, SP. Director: D. Peterson, Ph.D. Specimen collection, virus isolation and identification, and the interpretation of virus serology are studied. Laboratory work involves isolation, identification, and serological techniques of the diagnostic virology laboratory. By arrangement with the Infectious Disease Section, students select cases to be studied in conjunction with the laboratory experience.

Prerequ: MICRO 451, INMED 503; Elective; duration variable.

Neurological Sciences**NEURO 451**

Neurobiology. SP. Director: P. Nausieda, M.D. Associate Director: W.F. Hughes, Ph.D. Neurobiology offers an integrated approach to the central and peripheral nervous system from an anatomic, physiologic and neurochemical standpoint. Using neuroanatomy as a starting point, major systems are developed and discussed in terms of anatomic arrangement, physiologic functioning and related synaptic pharmacology. In all systems clinical lectures highlight the practical applications of basic science concepts in patient evaluation and management. The course is designed to provide a basic fund of knowledge in preparation for further study of neuropharmacology and clinical neurology.

Requ: First Year; 72 hours.

NEURO 601

Clinical Neurology. SU, FA, WI, SP. Director: W. Weiner, M.D. Patients with various neurological disorders are studied. Invasive and non-invasive techniques are observed and practiced. Neuropharmacology, rehabilitation, and specific therapeutic programs are emphasized. Working with both hospitalized and ambulatory patients, the primary emphasis is on enhancing diagnostic abilities in neurological disorders.

Prerequ: INMED 601; Requ: Third or Fourth Year; 4 weeks.

NEURO 602

Advanced Clinical Neurology. SU, FA, WI, SP. Director: W. Weiner, M.D. This advanced clerkship is intended to provide students the opportunity to further develop their clinical skills. Students will participate in the outpatient activities of the department and in particular will have ample opportunities to see patients in the movement disorder, epilepsy, muscular dystrophy, and multiple sclerosis clinics.

Prerequ: INMED 601; NEURO 601. Elective, 4-8 weeks.

NEURO 681

Research in Neurology. SU, FA, WI, SP. Director: W. Weiner, M.D. and Staff. Students will participate in ongoing research projects within the department. Current areas of investigation include neuropharmacology, movement disorder, cerebrovascular disease, sleep disorders, epilepsy, neuromuscular disorders, multiple sclerosis, and dementia.
Prerequ: NEURO 451 preferred. Elective, 8-12 weeks.

Obstetrics and Gynecology**OBGYN 601**

Clinical Clerkship in Obstetrics and Gynecology. SU, FA, WI, SP. Director: L. Janus, M.D. The course in clinical obstetrics and gynecology is designed to familiarize the student with the female reproductive tract. The course is divided into instructional units with instructional objectives and patient management in ambulatory and hospitalized patients. Emphasis is placed on routine gynecologic health care maintenance and patient education. Identification and management of high-risk pregnancy, infertility and other endocrinopathies, gynecologic oncology, family planning, psychosomatic disorders, and normal psychological changes in obstetrics and gynecology as well as gynecologic surgery are some of the areas covered in detail.
Prerequ: CLTUT 512; Requ: Third or Fourth Year; 8 weeks.

OBGYN 621

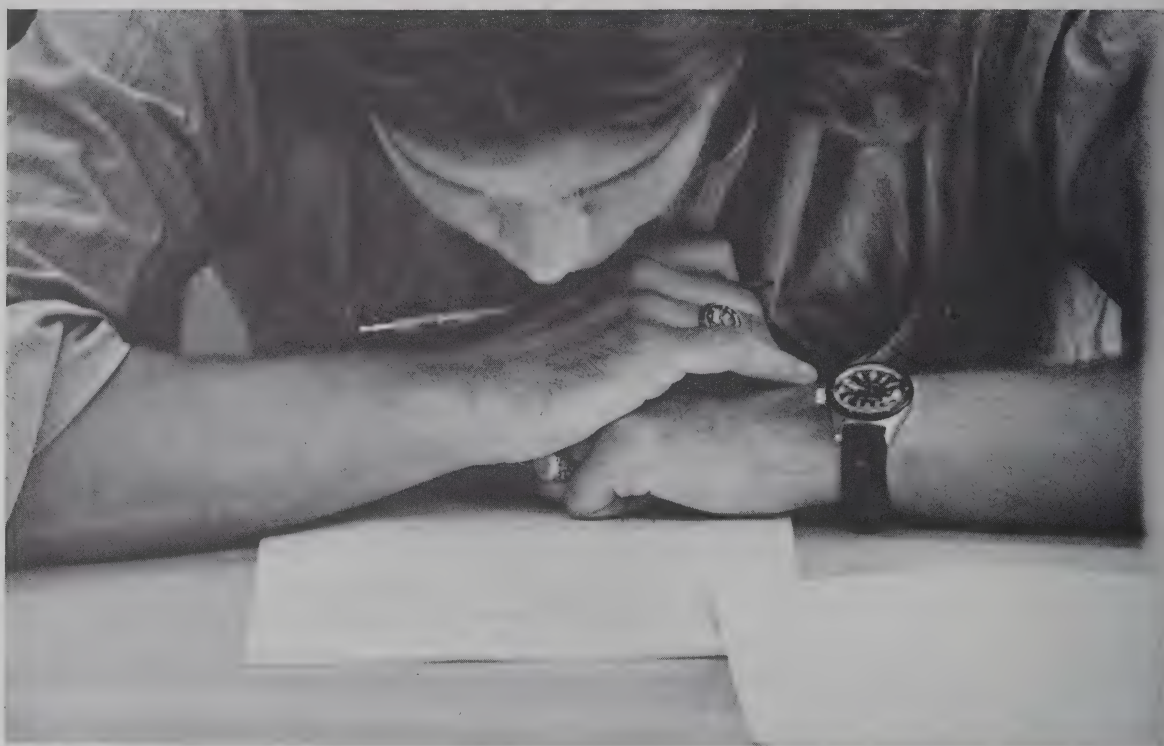
Normal Obstetrics. Director: F. Merrick, M.D. Emphasis in this elective is ideal support of the normal pregnant patient. Specific areas covered are preparation for childbirth (Lamaze etc.), psychology of childbirth, alternatives to childbirth, Leboyer method, and parental-infant bonding.
Prerequ: OBGYN 601; Elective, 8 weeks.

OBGYN 661

Gynecologic Oncology. SU, FA, WI, SP. Director: E. Yordan, M.D. Gynecologic oncology encompasses the diagnosis, management and follow-up of female reproductive tract tumors. The students are introduced to the use of diagnostic procedures such as colposcopy, laparoscopy, and biopsies, as well as treatment with chemotherapy and cancer surgery. The number of participants is limited.
Prerequ: OBGYN 601; Elective; 8 weeks.

OBGYN 666

Ambulatory/Reproductive Health Care. SU, FA, WI, SP. Director: N. Neches, M.D. This elective provides for additional clinical experience in family planning practices. The basis of the work is primarily ambulatory. The student interviews and examines patients, prescribes methods of family planning, and conducts follow-up under supervision of the staff.
Prerequ: OBGYN 601; Elective; 8 weeks.



OBGYN 667	<i>Gynecologic Endocrinology and Infertility.</i> SU, FA, WI, SP. Acting Director: H. Stassner, M.D. This elective provides the opportunity to participate in the clinical evaluation and interpretation of data of patients with gynecologic endocrine and infertility problems. Practical experience provided includes x-ray evaluation, laparoscopy, other operative procedures as well as radioimmunoassays. Prerequ: OBGYN 601; Elective; 8 weeks.
OBGYN 668	<i>Perinatology.</i> SU, FA, WI, SP. Director: D. Sherline, M.D. Emphasis of this elective is on the identification and management of high-risk pregnancy. Ultrasonography, amniocentesis, medical and surgical complications of pregnancy, and operative obstetrics are some of the specific topics dealt with in detail. Prerequ: OBGYN 601; Elective; 8 weeks.
Pathology	
PATHO 501	<i>General Pathology I.</i> FA. Director: B. Banner, M.D. The general concepts of pathology are studied, with an introduction to degeneration, inflammation, immune response, neoplasia, and metabolic and toxic pathological processes. The lectures and seminar groups are accompanied by laboratory work in the microscopic anatomy of pathological changes. Prerequ: ANAT 451, 472; Requ: Second Year; 61 hours.
PATHO 502	<i>General Pathology II.</i> WI. Director: B. Banner, M.D. Continuation of PATHO 501. Requ: Second Year; 67 hours.
PATHO 503	<i>General Pathology III.</i> SP. Director: B. Banner, M.D. Continuation of PATHO 502. Requ: Second Year; 63 hours.
PATHO 601	<i>Pathology Clerkship.</i> SU, FA, WI, SP. Director: R. S. Weinstein, M.D. The primary emphasis is on techniques and procedures used in autopsy pathology under the direction of a departmental faculty member. In addition, there is active participation in surgical pathology. A review of systemic pathology and cytology is provided. Participation in regular departmental teaching conferences and meetings provides opportunity for more general analysis and discussion of topics. Microscopes are provided. Prerequ: PATHO 501, CLTUT 512; Elective; 8 or 12 weeks.

Pediatrics

PEDS 601

Core Clerkship in Pediatrics. SU, FA, WI, SP. Director: E. Jung, M.D. The principles and practice of care from birth through adolescence are studied by direct patient contact. The primary objective is to provide an opportunity for students to become proficient in the clinical basis of pediatric diagnosis and therapy. The clinical facilities of both the inpatient and outpatient services of Rush-Presbyterian-St. Luke's Medical Center, Mount Sinai Hospital, Christ Hospital, and private physicians' offices are available. Regular seminars, conferences, lectures, and case presentations provide additional learning experiences.

Prerequ: CLTUT 512; Requ: Third or Fourth Year; 8 weeks.

PEDS 602

Pediatric Ambulatory Care. SU, FA, WI, SP. Director: Steven Waskerwitz, M.D. Primary focus is on the child and/or adolescent. From this perspective an understanding is developed in evaluating medical needs in terms of signs, symptoms, family, and environment. There is heavy emphasis on the study of normal growth, development, and behavior. All aspects of the provision of ambulatory care are studied. The Pediatric Ambulatory Service of Rush-Presbyterian-St. Luke's Medical Center is used as a teaching-learning environment. The level of responsibility allowed will be commensurate with prior clerkship experiences. Sites: ANCHOR, Mt. Sinai Hospital Medical Center, and Christ Hospital.

Prerequ: PEDS 601; Elective; 8 weeks.

PEDS 603

Introduction to Newborn Medicine. SU, FA, WI, SP. Director: W. Meier, M.D. This course is an introduction to the care of newborn infants and mothers, with emphasis on the normal sequence of events in the birth-recovery period, adaptation of baby and mother during the post-partum period, and care of the most common complications occurring at this age. Regular seminars and rounds are concerned with the study of specific assigned patients. The level of responsibility allowed students will be commensurate with their prior clerkship experiences.

Prerequ: PEDS 601; Elective; 4-8 weeks.

PEDS 604

Adolescent and Young Adult Medicine. SU, FA, WI, SP. Director: G. Strokosch, M.D. This course provides direct experience in the care of patients hospitalized on the inpatient Medical Center's Adolescent Unit. There will also be opportunity to see patients in the outpatient office of the director. Emphasis is placed on the multidisciplinary management of adolescent patients. The student is provided experience with disease processes unique to adolescents or manifested differently in this age group as compared to other age groups. The level of responsibility allowed students will be commensurate with their prior clinical training.

Prerequ: CLTUT 512; Elective; 4-12 weeks.

PEDS 605

Advanced Pediatrics. SU, FA, WI, SP. Director: J. Christian, M.D. Advanced studies in pediatrics and related disciplines provide increased depth and degree of responsibility in patient care. The clerkship also serves as a preparatory training phase for post-doctoral residency experience. The course utilizes both the inpatient and outpatient facilities of Rush-Presbyterian-St. Luke's Medical Center. The level of responsibility allowed students will be commensurate with their prior clinical training.
Prerequ: PEDS 601; Elective; 8-12 weeks.

PEDS 606

Pediatric Psychology. SU, FA, WI, SP. Directors: C. Brocken, Ph.D., J. Christian, M.D. This course focuses on the hospitalized pediatric patient—infancy through adolescence. Psychological aspects of illness and hospitalization are stressed, particularly in relation to psychosomatic, chronic, and terminal illnesses. The pediatric patient is viewed within the framework of the family and in relation to all involved health care personnel. The level of responsibility allowed students will be commensurate with their prior clinical training.
Prerequ: PEDS 601; Elective; 8 weeks.

PEDS 611

Pediatric Cardiology. SU, FA, WI, SP. Director: H. Bucheleres, M.D. Both ambulatory and inpatient experience is obtained in caring for children with heart disease. Correlation of x-ray and electrocardiographic and cardiac catheterization data with physical findings is intensively studied. Through patient assignment, the student participates in intraoperative and postoperative surgical management. Outpatient offices, inpatient service, and cardiorespiratory laboratories are available to aid in study. The level of responsibility allowed students will be commensurate with their prior clerkship experiences.
Prerequ: PEDS 601 or INMED 601; Elective; 4-12 weeks.

PEDS 622

Emergency Pediatrics. SU, FA, WI, SP. Director: S. Waskerwitz, M.D. At least 30-40 hours per week is involved in direct patient evaluation under the supervision of an attending pediatrician. This includes daily attendance in the pediatric emergency room and night call responsibility. The student is exposed to a majority of pediatric emergencies. The student will be required to maintain a log of patients seen and procedures performed, and is required to attend teaching conferences given by a pediatrician, and the didactic lecture on a suitable topic at one of the emergency pediatric conferences. Literature review will be required.
Prerequ: PEDS 601; Elective; 4 weeks

PEDS 624

Pediatric Critical Care. SU, FA, WI, SP. Director: M. Guerrero-Tiro, M.D. Emergency medicine is the essence of this course. It is geared towards the development of an astute mind, a capacity for quick decisions, self-confidence and equanimity along with the emphasis on acquiring a wide knowledge of the latest remedies, resourcefulness, and a good command of emergency procedures and equipment. Daily rounds, didactic lectures and monthly case conferences provide the backbone of learning experience. The level of responsibility allowed will be commensurate with prior clerkship experience.
Prerequ: PEDS 601; Elective; 8-12 weeks.

PEDS 626

Pediatric Nephrology. SU, FA, WI, SP. Co-Directors: H.B. Levy, M.D. and R. London, M.D. This rotation will provide the student with experience in the care of children with renal problems throughout the Rush network, including those hospitalized at Mount Sinai Hospital. Emphasis will be on normal and abnormal renal function, electrolyte imbalances, proteinuria, hematuria, hypertension, urinary tract infection and developmental diseases of the kidney and urinary tract.
Prerequ: PEDS 601; Elective; 4-8 weeks.

PEDS 631

Pediatric Radiology. SU, FA, WI, SP. Director: H.R. Gardner, M.D. Participants study diseases of children in an introduction to radiologic evaluation. They observe radiologic procedures and participate in analyses, reviews and general radiology conferences. Analysis involves assessment of appropriateness of an examination, detection of pertinent findings, interpretation of findings, and synthesis of interpretation and clinical presentation into reasonable diagnoses. Specific pediatric conferences for those rotating in pediatric radiology occur daily.
Prerequ: PEDS 601; Elective; 4 weeks.

PEDS 633

Clinical Toxicology. SU, FA, WI, SP. Course Director: G. Maggini, Pharm. D. This course will provide an introduction to the basic principles of toxicology with emphasis on management of commonly ingested toxic substances such as acetaminophen, aspirin, acids, alkali, cosmetics, hydrocarbons, iron, plants, soaps and detergents. The student will be given supervised responsibility commensurate with prior clinical training.
Prerequ: PEDS 601; Elective; 4-8 weeks.

PEDS 641

Allergy/Clinical Immunology. SU, FA, WI, SP. Director: J. Hyde, M.D. The clinical approach to the problems of allergy and immunology in children and adults is studied. Special studies of acute and chronic respiratory tract and dermatologic conditions are emphasized. Patients with circulating and cellular antibody disorders are investigated. The inpatient and outpatient facilities of Rush-Presbyterian-St. Luke's Medical Center are used.
Prerequ: PEDS 601 or INMED 601; Elective; 12 weeks.

PEDS 642

Pediatric Hematology/Oncology. SU, FA, WI, SP. Director: M. Pierce, M.D. This course provides an introduction to the care of children with a variety of hematologic disorders, or malignancies of childhood. Ward rounds are made daily for inpatients on the service and consultations. Outpatient clinics are held three half-days a week. Teaching seminars for students and residents are held weekly. Hematology laboratories are available for study in the morphology of blood cells and other hematological investigations.

Prerequ: PEDS 601; INMED 601; Elective; 8 weeks. Senior students.

PEDS 646

Pediatric Infectious Disease. SU, FA, WI, SP. Director: C. Lamprecht, M.D. The elective clerkship in Pediatric Infectious Disease focuses on clinical and laboratory evaluation of pediatric infections. An active consultation service at Rush-Presbyterian-St. Luke's Medical Center and Mount Sinai Hospital provides ample opportunity for patient evaluation and followup. Correct use of laboratory facilities is stressed. Pathophysiology of infectious diseases, differential diagnosis, and antibiotic use are discussed on daily ward rounds and weekly conferences. Current research is discussed at weekly seminars. The level of responsibility allowed students will be commensurate with their prior clinical training.

Prerequ: PEDS 601; Elective; 4 weeks.

PEDS 671

Pediatric Pulmonary Medicine. SU, FA, WI, SP. Director: F. Duda, M.D. An elective in Pediatric Pulmonary Medicine will include: a review of developmental and clinical pulmonary physiology; current diagnostic and therapeutic modalities; respiratory manifestations of diseases and other problems in children; daily rounds and consultations; and conference presentations. An elective article for publication or participation in a research project will be encouraged.

Prerequ: PEDS 601; Elective; 4-8 weeks.

Pharmacology**PHARM 501**

Pharmacology I. FA. Director: B. Moon, Ph.D. The general aspects of the physiochemical factors governing drug receptor interactions, importance of quantitative aspects of absorption, distribution, biotransformation and excretion of drugs are studied. The probable modes of drug actions that modify biological function and representatives of special classes of drugs are studied to acquaint the student with the major classes of drugs. Laboratories and demonstrations extend the lecture material and offer the student practical experience with drug effects in the living organism. Small group discussions correlate lectures, laboratory exercises, and current therapeutic applications.

Requ: Second Year; 48 hours.

PHARM 502

Pharmacology II. WI. Director: B. Moon, Ph.D. Continuation of PHARM 501.

Requ: Second Year; 46 hours.



- PHARM 503** *Pharmacology III*. SP. Director: B. Moon, Ph.D. Continuation of PHARM 502.
Requ: Second Year; 19 hours.
- PHARM 504** *Advanced Medical Pharmacology*. SP. By special arrangement. Director: A. Prancan, Ph.D. A study of mechanisms of action of special classes of drugs. Emphasis is on the pharmacophoric moiety and the relationship of the chemical structure of the biological activity.
Prerequ: PHARM 503; Elective.
- PHARM 521** *Laboratory Instrumentation*. SP. By special arrangement. Director: G. Parkhurst, Ph.D. Course covers principles and applications of experimental equipment. Techniques that make use of such equipment will include ultraviolet and visible spectrophotometry, spectrophotofluorometry, thin-layer chromatography, column chromatography, high-pressure liquid chromatography, gas chromatography, mass spectrometry, atomic absorption, liquid scintillation spectrometry, platelet aggregation, oxygen measurement, blood pressure and flow measurements, cardiac tension measurement, tissue oxidation, isotope use and handling, pH adjustment, sample weighing, melting point determination, hematocrit determination, centrifugation, and glassware cleaning.
Elective.
- PHARM 541** *Research in Blood Genetics and Pharmacogenetics*. By special arrangement. Directors: H. Frischer, M.D., Ph.D., and P. Carson, M.D.
Elective.
- PHARM 551** *Pharmacokinetics*. By special arrangement. Directors: M. Nora, Ph.D., and G. Parkhurst, Ph.D. This course covers basic principles in the dynamics of absorption, distribution and elimination under normal conditions and in selected disease states.
Prerequ: PHARM 503; Elective.
- PHARM 598** *Research in Pharmacology*. By special arrangement. Director: A. Prancan, Ph.D.
Elective.
- PHARM 603** *Biochemical Pharmacology*. Alternate SP. Director: B. Moon, Ph.D. Topics include biochemical aspects of pharmacokinetics, structure-function, drug-receptor interactions, and comparative pharmacology.
Prerequ: PHARM 503; Elective.
- PHARM 611** *Neuropharmacology*. Alternate FA. Director: H. Klawans, M.D. Seminar course presenting both preclinical and clinical aspects of drugs used in the treatment of neurologic and psychiatric disorders.
Prerequ: PHARM 503; Elective.

PHARM 612	<i>Neuropharmacology</i> . Alternate WI. Director: H. Klawans, M.D. Seminar course presenting both preclinical and clinical aspects of drugs used in the treatment of neurologic and psychiatric disorders. Prerequ: PHARM 503; Elective.
PHARM 613	<i>Neuropharmacology</i> . Alternate SP. Director: H. Klawans, M.D. Seminar course presenting both preclinical and clinical aspects of drugs used in the treatment of neurologic and psychiatric disorders. Prerequ: PHARM 503; Elective.
PHARM 621	<i>Cardiovascular-Renal Pharmacology</i> . Alternate FA. Director: A. Prancan, Ph.D. Course in advanced concepts of drug action as they relate to hypotension, hypertension, and altered flow states. Prerequ: PHARM 503; Elective.
PHARM 622	<i>Experimental Models in Pharmacology</i> . By special arrangement. Directors: E. Boyd, and A. Prancan, Ph.D. A laboratory course concerned with the techniques involved in preparing experimental animal and tissue models. Prerequ: PHARM 503; Elective.
PHARM 631	<i>Clinical Pharmacology and Therapeutics</i> . WI. Director: C. MacLeod, M.D. Study of the integration of clinical work with therapeutic aspects of pharmacology; includes discussion of the pharmacology, clinical pharmacology, therapeutics, and clinical applications for major drug groups. Prerequ: PHARM 503; Elective.
PHARM 641	<i>Pharmacogenetics</i> . By special arrangement. Director: P. Carson, M.D. Advanced tutorial covering current concepts in genetic influences on pharmacodynamics. Prerequ: PHARM 503; Elective.
PHARM 691	<i>Pharmacology Seminar</i> . FA, WI, SP. Director: M. Nora. Elective.
PHARM 699	<i>Dissertation Research</i> . Staff.

Physical Medicine and Rehabilitation

PMEDR 601	<i>Physical Medicine and Rehabilitation</i> . SU, FA, WI, SP. Acting Director: E.J. McCarron, M.D. Experience in this course includes histories, physical evaluations, patient care, observation in various paraprofessional areas, and attendance at staff meetings. Student participation includes electrodiagnostic and motor point blocks; other techniques and programs in which residents participate; and attendance at grand rounds. A research project is desirable. Prerequ: SURG 601; Elective; 4 weeks.
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Physiology

PHYSO 451

Physiology. FA. Director: A. Rovick, Ph.D. This is a comprehensive physiology course which deals with essentially all of the major organ systems except the central nervous system. Concept formation and problem solving are stressed. Lectures are supplemented by small group discussions and laboratory exercises. The student is expected to discuss assigned study questions in the group discussions. Laboratory exercises are divided between conventional experiments and computer simulations of physiological systems.

Requ: First Year; 68 hours.

PHYSO 452

Physiology. WI. Director: A. Rovick, Ph.D. Continuation of PHYSO 451.

Prerequ: PHYSO 451; Requ: First Year; 63 hours.

PHYSO 690

Research Topics in Physiology. SU, SP. Director: J. Michael, Ph.D. With a member of the staff, the student participates in a laboratory-based experience in an area of current research. The level of participation depends on background and will include examination of the literature, a review of the topics being investigated, and opportunities to participate in experimental work. In addition to work in the laboratories with members of the staff, independent experimental or bibliographic projects may be undertaken with the approval of a faculty member. At completion, a report is prepared describing the work attempted and accomplished.

Prerequ: PHYSO 452; Elective; 8 weeks.

Preventive Medicine

PRMED 451

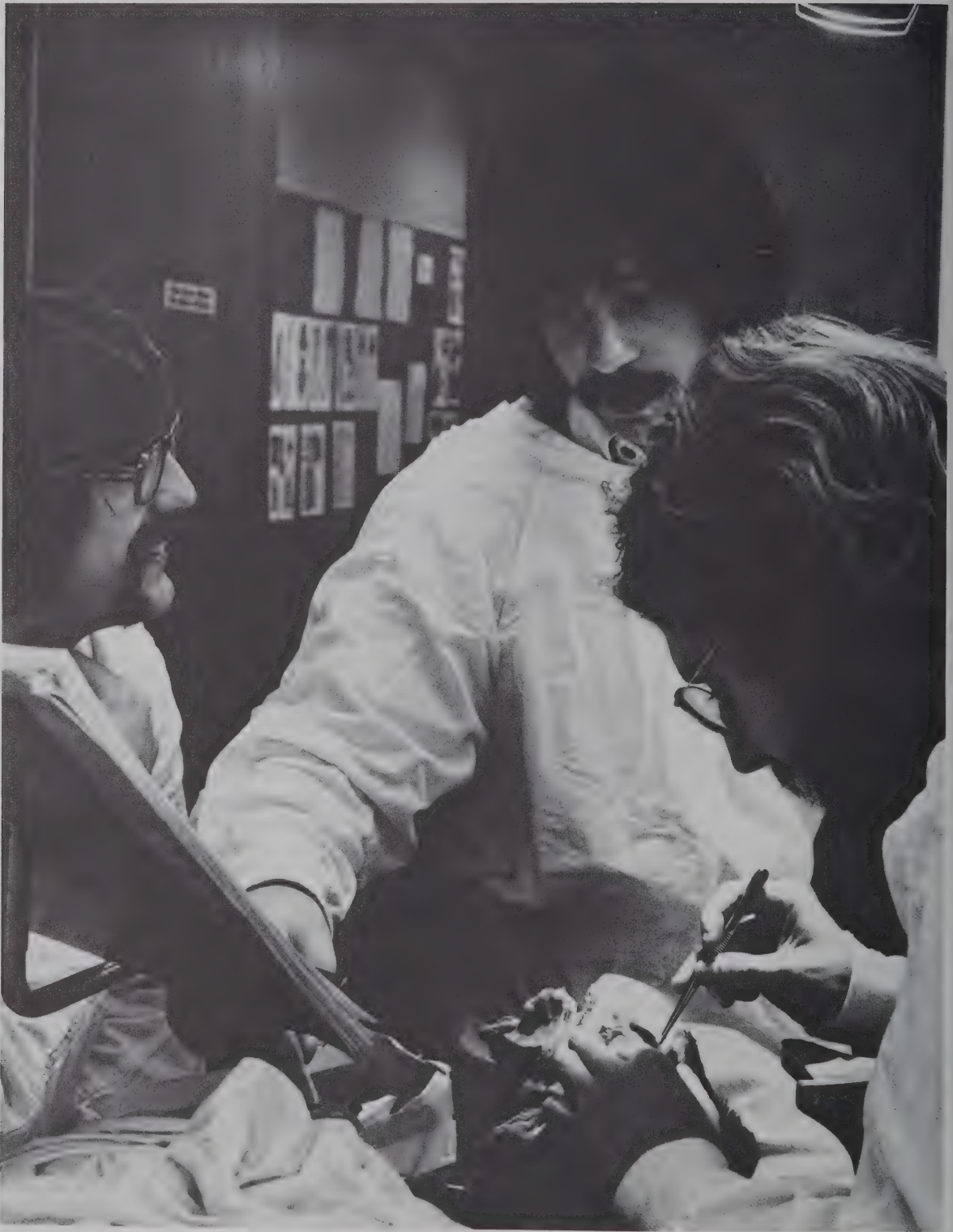
Preventive Medicine. SP. Director: T. Madden, M.D. A general survey is provided in three topics: biostatistics provides an introduction to the use of statistical methods, particularly in the statistical evaluation of research data; a general survey of epidemiology provides an introduction to current methods and problems in practice; and preventive medicine is concerned with socioeconomic factors in health care, preventive practices, and environmental and occupational health. The course is conducted through lectures, panels, and seminars.

Requ: First Year; 33 hours.

PRMED 521

Introduction to Statistical Data Processing. FA. Director: S. Liu, M.S. This course teaches the use of SPSS and SAS, two programs for statistical analysis on a large computer. Students will be taught both batch and interactive (CMS) techniques for programming and data entry. No previous knowledge of computers or programming is required.

Elective: 12 weeks, 12 hours.



- PRMED 531** *Introductory Biostatistics.* FA, WI, SP, SU. Director: W. Raynor, Ph.D. This course provides a basic introduction to the understanding and use of statistics in the health sciences. Topics covered include: descriptive statistics, probability, sampling, point and interval estimation, and hypothesis testing with Student's *t* and chi-square. Elective: 12 weeks, 36 hours.
- PRMED 532** *Introductory Statistical Data Analysis.* FA, WI, SP, SU. Director: W. Raynor, Ph.D. This course, along with Intermediate Statistical Data Analysis, teaches the basic tools necessary to design and analyze a study along sound statistical lines. In this course, the student will be introduced to analysis of variance, and multiple regression analysis. Prerequ: PRMED 531; Elective; 12 weeks, 36 hours.
- PRMED 533** *Intermediate Statistical Data Analysis.* FA, WI, SP, SU. Director: W. Raynor, Ph.D. This course will complete the course of study started in Introductory Statistical Data Analysis. The course will primarily consider the techniques of analysis of variance and analysis of covariance. There will also be some consideration of multivariate analysis techniques, and sampling design. Prerequ: PRMED 532; Elective; 12 weeks, 36 hours.
- PRMED 599** *Independent Study in Statistics.* FA, WI, SP, SU. Director: W. Raynor, Ph.D. Advanced topics by arrangement with instructor.
- PRMED 601** *Primary Care.* SU, FA, WI, SP. Director: J. Schoenberger, M.D. Ambulatory care in a physician's office is the basis for this clerkship. On a preceptorial basis in selected physicians' offices, the students study in depth the contemporary modes of office care, with emphasis on preventive measures and follow-up care. By individual arrangement, experience is available in a variety of settings such as group practice, inner-city clinics, rural practice, etc. Experience in foreign countries is also available. Prerequ: CLTUT 512; Elective; 4-12 weeks.
- PRMED 603** *Occupational Medicine.* SU, FA, WI, SP. Director: R. Kassriel, M.D. This experience provides a combination of didactic and practical work in approaching the problems of health maintenance and environmental hazards in diverse industrial settings. Prerequ: INMED 601; Elective; 8 weeks.
- PRMED 604** *Field Experience in Epidemiology.* SU, FA, WI, SP. Director: J. Schoenberger, M.D. Emphasis is placed on the collection and analysis of data obtained in epidemiologic studies. The student may select a project and is expected to become familiar with field epidemiologic techniques and tools, including questionnaire design and interviewing. Primary focus is on studies of cardiovascular disease, with special emphasis on the control of hypertension and prevention of cardiac disease. Prerequ: CLTUT 512; Elective; 12 weeks.



PRMED 605

Research Studies in Health Care Delivery. SU, FA, WI, SP. Director: J. Schoenberger, M.D. Under supervision, the student undertakes research on problems in health care delivery. The models available in the Medical Center are utilized primarily, but other systems may be studied by arrangement. Such areas as health evaluation programs, the use of paramedical personnel, medical audit, and emergency room care are available.

Prerequ: CLTUT 512; Elective; 8 weeks.

Psychiatry**PSYCH 501**

Introduction to Psychopathology. FA. Director: R. Zadyak, M.D. Introduction to Psychopathology is designed to prepare medical students for future clinical experiences through the discussion of the range of psychopathology that will be manifested in clinical situations. By reviewing diagnostic criteria and studying etiological factors underlying various forms of psychopathology, ranging from disturbances in cellular and neurotransmitter function through psychological and social stresses, students should develop a basic understanding of common psychiatric conditions which will enable them to build a base of knowledge for their recognition and management in future clinical experiences.

Prerequ: BEHAV 451, 453; Requ: Second Year; 34 hours.

PSYCH 601

Clerkship in Psychiatry. SU, FA, WI, SP. Director: R. Zadyak, M.D. The core psychiatry clerkship provides basic clinical and didactic exposure to the major psychiatric disorders focusing on their diagnosis and management. Emphasis is placed on aspects of psychiatry relevant to the primary practitioner with a holistic approach to patient care; recognizing the significant biological, psychological, and social/environmental factors contributing to the patient's illness. Systems concepts of care are presented in an integrated manner through graded, intensive clinical experiences. Inpatient, partial hospitalization, and ambulatory settings are employed for assignment of patient responsibility.

Prerequ: CLTUT 512; Requ: Third or Fourth Year; 6 weeks.

PSYCH 602

Psychosomatic Medicine. SU, FA, WI, SP. Directors: S. Cavanaugh, M.D., P. Chor, M.D., R. Zadyak, M.D. The relationship between internal and external stresses and the development of physical symptomatology as well as therapeutic interventions are studied. Adults and children hospitalized on medical, surgical, obstetric, or pediatric services are studied with supervised diagnostic evaluation and continuing management. The role of the milieu—home, community, and hospital—is emphasized. Special work is done with dialysis patients, transplant patients, patients with malignancy, and those undergoing intensive care. The clerkship is planned as an experience in all areas, with emphasis depending upon student interest and needs.

Prerequ: PSYCH 601; Elective; 8 weeks.

PSYCH 603

Child Psychiatry. SU, FA, WI, SP. Director: P. Fink, M.D. The important variations in behavior in the young are studied, with emphasis on various therapeutic approaches in the setting of a day hospital for children. The pediatric floor, private office, outpatient clinic and the Child Psychiatric Clinic are also utilized as settings for clinical observations.

Prerequ: PSYCH 601; Elective; 8 weeks.

PSYCH 604

Adult Psychiatry. SU, FA, WI, SP. Director: J. Cavanaugh, M.D. The objective of this elective is to increase the student's knowledge of various psychiatric disorders and to provide an opportunity to improve skill in therapy. Drug therapy, individual psychotherapy, family therapy, and group therapy are studied. Emphasis is placed on crisis management and brief therapy in a setting providing continuity of care, including in-home visits, community clinics, hospital clinics, partial hospitalization, and full-time hospitalization.

Prerequ: PSYCH 601; Elective; 8 weeks.

PSYCH 631

Medical Psychotherapy. SU, FA, WI, SP. Director: P.S. Epstein, M.D. The varieties of psychotherapies are reviewed and the essentials of medical psychotherapy are studied in detail. The application of group systems is developed. Practical supervised experiences provide the means by which psychotherapeutic interventions are learned. The emphasis will be on some of the newer brief techniques, such as cognitive therapy and interpersonal therapy. The interfacing of individual medical psychotherapy with neuropsychopharmacotherapy and social system therapies will also be elaborated.

Prerequ: PSYCH 601; Elective; 8 weeks, may be extended.

PSYCH 641

Law and Psychiatry. SU, FA, WI, SP. Director: J.L. Cavanaugh, M.D. The Section on Psychiatry and the Law provides the elective student with a comprehensive clinical and academic introduction to socio-legal issues in contemporary psychiatric practice and research. Through clinical rotation at the Isaac Ray Center of the Department of Psychiatry, the student will gain first hand experience in the evaluation and treatment of selected mentally ill offenders under supervision. The student also will be expected to cover a reading list dealing with the important topical issues in social-legal psychiatry: civil commitment, competency to stand trial, the insanity defense, right to treatment, right to refuse treatment, confidentiality and privilege, etc. Participation in an on-going appropriate research project is encouraged. The student receives individualized instruction from an attorney, a postdoctoral fellow in law and psychiatry, the director of the section, and appropriate staff of the Isaac Ray Center.

Prerequ: PSYCH 601; Elective; 8 weeks.

PSYCH 681

Community Psychiatry. SU, FA, WI, SP. Directors: M. Orloff, M.D., Y. K. Ahluwalia, M.D. By assignment to a community clinic and through seminars and didactic exercises, the theory and practice of the current concepts of community psychiatry are studied. Treatment team visits to the home aid in developing direct experience in diagnostic and short-term treatment. The concept of the medical care team is primary in the provision of these mental health services.
Prerequ: PSYCH 601; Elective; 8 weeks.

PSYCH 682

Alcoholic Treatment Program. SU, FA, WI, SP. Directors: J. Tilkin, M.D., V. Pisani, Ph.D. This experience involves the inpatient therapeutic milieu. The multidisciplinary diagnostic and treatment approach to acute, intermediate, and long-term management and rehabilitation of patients with alcoholism is studied. The medical, biological, educational, social, environmental, behavioral, and psychological aspects of alcoholism are studied in the therapeutic situation. The pursuit of special interests is encouraged.
Prerequ: PSYCH 601; Elective; 8 weeks.

Radiology**RADIO 521**

Radiation Oncology. SU, FA, WI, SP. Directors: F.R. Hendrickson, M.D., and M.S. Lee, M.D. An introduction to neoplastic diseases and their management services with emphasis on improvement of physical diagnosis skills, relational anatomy and the pathophysiology of different cancers.
Prerequ: PATHO 501, INMED 501; Elective; 4-8 weeks.

RADIO 522

Basic Radiation Biology. SU, FA, WI, SP. Director: W.R. Hanson, Ph.D. The course is designed to introduce students to the general principles governing the effects of ionizing radiation on living organisms. A general knowledge of radiation physics and biology is assumed. The course will consider radiation effects on a progression of organism complexities from single cell systems through organized tissue systems and complex organisms through the known effects on man. Emphasis will be put on those radiobiological principles which closely relate to cancer research such as the relationship of linear energy transfer to relative biological effectiveness and the role of oxygen as a radiation modifying agent along with other protecting and sensitizing agents.
Elective; 16 lecture hours.

RADIO 601

Diagnostic Radiology. SU, FA, WI, SP. Director: Y. Adler, M.D. Basic radiologic principles are demonstrated and the role of diagnostic radiology as a clinical setting for patient care and medical and surgical specialty consultations are emphasized. Seminars, classes, and programmed material especially prepared for medical students are provided. Elective experience in several departmental subsections is available.
Prerequ: INMED 601, SURGY 601, PEDS 601; Elective; 4 weeks.

RADIO 602

Physics of Diagnostic Radiology, SU, FA, WI, SP. Director: A. Chung-Bin, M.S.C. Fluoroscopy, x-ray image intensifiers, cinefluorography, television, body-section radiography, stereoscopy, magnification radiography, the subtraction technique including digital imaging, copying radiographs, xeroradiography, computed tomography, ultrasound, focused nuclear magnetic resonance scanning.

Prerequ: RADIO 601; Elective; 24 hours.

RADIO 603

Introduction to Radiation Safety and Diagnostic Radiological Physics, SU, FA, WI, SP. Directors: A. Chung-Bin, M.S.C. and M. Mengeot, Ph.D. Medical x-ray and gamma-ray protection for energies up to 10 MeV, equipment design and use, maximum permissible dose equivalent, fluoroscopic and radiographic equipment, gamma-beam sealed source equipment, calibration, survey procedures, personnel monitoring, production of x-rays, x-ray generators, attenuation, filtration, grids, intensifying and fluoroscopic screens, physical and photographic characteristics of x-ray film and film processing, geometry of the radiographic image.

Prerequ: RADIO 601; Elective; 24 hours.

RADIO 606

Nuclear Medicine. SU, FA, WI, SP. Director: E. Fordham, M.D. All facets of the disciplines of nuclear medicine are studied, with particular emphasis on radionuclide scanning of organ systems for diagnostic and research purposes. Emphasis is on pathophysiologic correlation and case study. Literature review and individual topics are encouraged to provide in-depth study in the broad field of nuclear medicine.

Prerequ: INMED 503; Elective; 4 weeks.

RADIO 621

Radiation Oncology, SU, FA, WI, SP. Directors: F.R. Hendrickson, M.D., and M.S. Lee, M.D. This course will develop the basic concepts and principles of non-surgical cancer management. The natural history of cancers in various organs will be reviewed and therapeutic strategies developed based on the pathophysiology of different cancer sites. The location of critical normal organ systems will be stressed. Their tolerances to treatment will be detailed and methods to optimize treatment with maximal tumor dose and minimal normal tissue developed. Correlation of all body imaging systems (radionuclide, standard and computer radiographic) with treatment simulation and body surface land marks will be emphasized.

Prerequ: INMED 501, PATH 501; Elective; 4-8 weeks.

RADIO 622

Introduction to Therapeutic Radiological Physics, SU, FA, WI, SP.

Director: P. Kartha, M.S. Basic computation and physics, interaction of radiation with matter, definition and measurement of dose, therapy machines, physical and clinical dosimetry including backscatter, percentage depth dose, tumor-air ratio, tumor maximum ratio, isodose distributions, wedges, compensators, correction for lungs and curvature, radioisotopes, radium and its substitutes, interstitial and intracavitary applications, electron beams, time-dose relationship including nominal standard dose, radiation protection, quality assurance.

Prerequ: RADIO 621; Elective; 24 lecture hours.

RADIO 623

Therapeutic Radiological Physics, SU, FA, WI, SP. Director: P. Kartha, M.S. The five 'P's' of radiation therapy: prescription, physical dose, planning, precision, and pattern of treatment output; atomic structure, nuclear structure, fission and fission reactors, fusion, radioactive decay, natural and artificial radioactivity, interactions of particulate radiations including electrons, pions, neutrons, and heavy charged particles; production of x-rays, including x-ray tubes and circuits; high-energy treatment machines; interactions of x- and gamma-rays, measurement of exposure, radiation quality, absorbed dose; calibration of high-energy photon and electron beams; dose distributions for external-beam therapy, and sealed-source therapy; computerized treatment planning; radiation protection from external sources and internal sources.

Prerequ: RADIO 622; Elective; 36 lecture hours.

RADIO 624

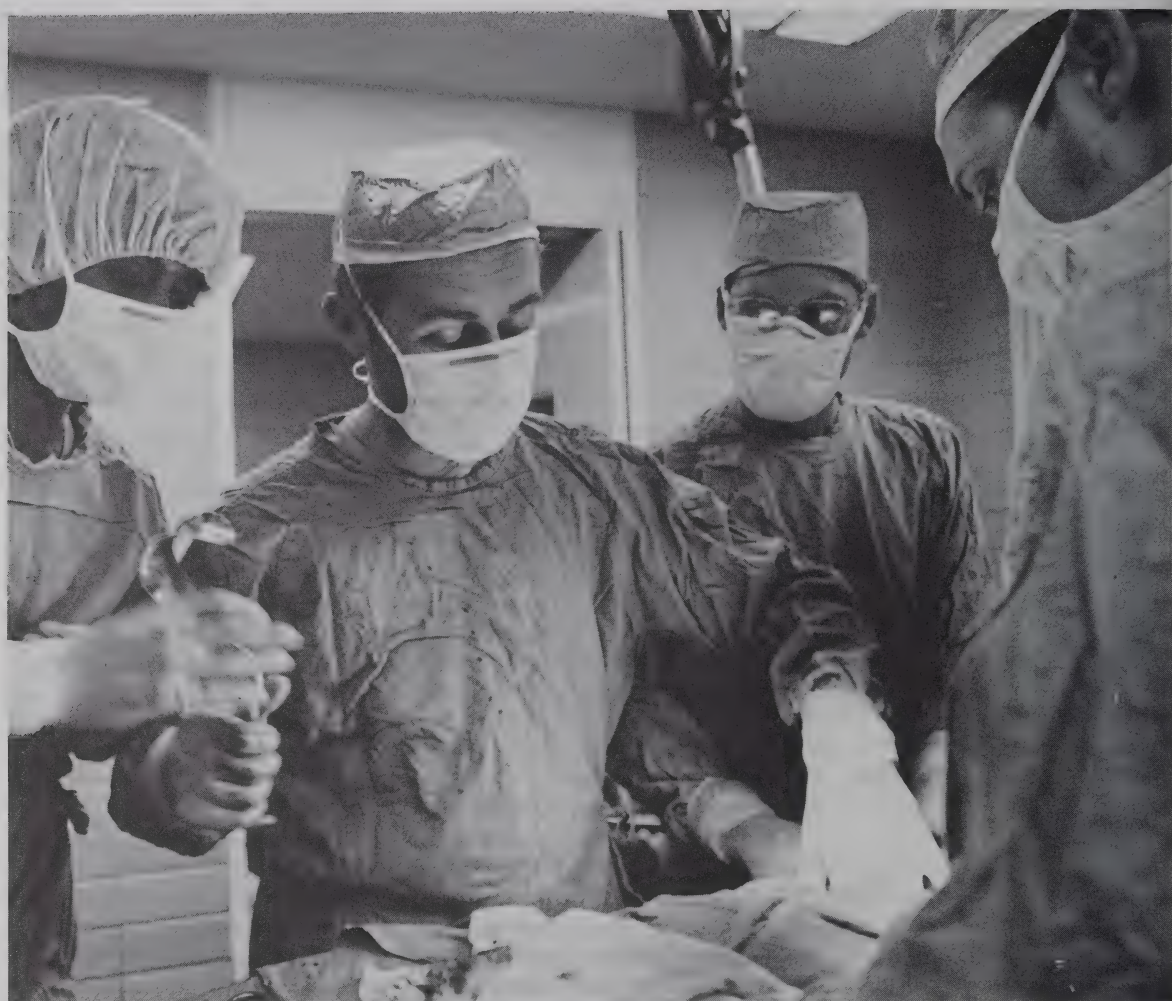
Dosimetry Applied to Therapeutic Radiology, SU, FA, WI, SP. Director: P. Kartha, M.S. This course is designed for those interested in therapeutic radiology and is organized as a rotation in the Section of Medical Physics. The laboratory exercises consist of the determination of single, two, three and four field isodose distributions. These exercises of distributions take into account variations of field size, source-skin distance, source-detector distance and source-axis distance. Special studies for the treatment of breast, larynx, pelvis, and head are performed. Calculations are performed by hand and by a PDP 11/45 computer. Special problems such as upper mantle and 'dog leg' are performed.

Elective; 160 laboratory hours.

RADIO 631

Physics of Nuclear Medicine, SU, FA, WI, SP. Director: E. Silverstein, Ph.D. Mathematics for nuclear medicine, physical quantities and units, mechanics, thermodynamics, electricity and magnetism as applied to nuclear medicine, nuclear reactions, decay schemes, half life, decay series together with parent-daughter relationships and applications, interaction of radiation with matter, detectors used in nuclear medicine, in-vitro counting systems, liquid-scintillation counting, pulse height spectrometry, imaging instrumentation including rectilinear scanner, scintillation camera, emission tomography, application of the computer to nuclear medicine including imaging and in-vivo studies, biological effects of radiation, absorbed dose from internal sources.

Prerequ: RADIO 606; Elective; 22 lecture hours.



Surgery

SURGY 510

Basic Cardiac Life Support. WI. Director: A. Ivankovich, M.D. The purpose of this course is to provide every student with the requisite skills to identify circulatory and/or respiratory arrest and to move immediately to effective and acceptable resuscitative work. Both one-person and two-person techniques will be mastered. The course uses both lectures and personal supervision and makes use of audiovisual aids and adult and infant resuscitative manikins. Reading materials are provided. In addition, personal instruction is given on arrhythmia identification with use of an arrhythmia simulator.
Requ: Second Year; 5 hours.

SURGY 601

Clerkship in Surgery. SU, FA, WI, SP. Director: A. Doolas, M.D. The principles of preoperative and postoperative care, the diagnosis of surgical disease, indications for surgery, and the physiological principles of surgery are stressed through the case study method, consisting of three patients per week. Technical experience is provided in the operating rooms. Daily lectures and conferences provide additional direct contact with faculty. In addition to general surgery, the students choose from available surgical electives to complete the clerkship.
Prerequ: CLTUT 512; Requ: Third or Fourth Year; 12 weeks.

SURGY 602

Surgical Technique. SU, FA, WI, SP. Directors: D. Monson, M.D., H. Paul, M.D., M. Haklin. The course is conducted in the large animal laboratory from 1-5 p.m. on Monday for ten weeks. The objective of the course is to acquaint the surgical student with scrubbing technique, operating room etiquette, gowning, draping, and instrument handling, and provides a basic introduction to fundamental techniques in the various fields of surgery. These include the proper usage of instruments, knot-tying, suture handling, arterial and venous cut-downs, tracheostomy, gastrointestinal anastomoses, genitourinary surgery, plastic surgery, and the ethics of the animal laboratory; postoperative follow-up is expected.
Prerequ: SURGY 601; Elective; 10 weeks.

SURGY 604

Advanced Clerkship in Surgery. SU, FA, WI, SP. Director: H. Southwick, M.D. The student assumes many of the duties and responsibilities of a resident physician. This includes responsibility for preoperative and postoperative care, participation in surgery, and rotating on-call service. The work is primarily with hospitalized patients, with opportunity for ambulatory and elective surgery. Independent library investigative projects are assigned.
Prerequ: SURGY 601; Elective; 12 weeks.

SURGY 605

Anesthesiology. SU, FA, WI, SP. Director: A. Ivankovich, M.D. The program enables medical students to have sufficient instruction in anesthesiology and related topics to develop the following knowledge and skills: recognize the need for and conduct cardiopulmonary resuscitation (CPR); learn airway management; recognize respiratory inadequacy and conduct artificial ventilation with mask and bag; recognize circulatory inadequacy and initiate support of the failing circulation; induce topical and infiltrative anesthesia safely; understand the actions and interactions of depressant and stimulant drugs commonly encountered or used by anesthesiologists; and participate in preoperative evaluation and preparation of surgical and obstetric patients. Elective; 4 weeks.

SURGY 606

Clinical Transplantation. SU, FA, WI, SP. Director: F. Merkel, M.D. The clinical aspects of transplantation, including donor and recipient surgery and preoperative and postoperative care are studied. The student participates in organ preservation as well. Seminars on the fundamental and clinical aspects of transplant immunology are held. Prerequ: SURGY 601; Elective; 4-12 weeks.

SURGY 607

Transplantation Research. SU, FA, WI, SP. Director: F. Merkel, M.D. The primary emphasis is laboratory research in the animal, perfusion, and immunologic laboratories. The student is responsible for supervised research in organ transplantation, transplant immunology, and other clinically oriented problems. Prerequ: SURGY 601; Elective; 12 weeks.

SURGY 611

Cardiovascular Surgery. SU, FA, WI, SP. Director: H. Najafi, M.D. This course emphasizes the clinical and laboratory diagnosis of cardiac (both congenital and acquired) and vascular disorders considered for surgical management. Indications for surgery, preoperative evaluation and postoperative care are discussed at patient rounds, in conferences, and on an individualized basis. In addition, ample opportunities are offered for students to observe and, in certain instances, to participate in vascular and open heart surgery. Prerequ: SURGY 601; Elective; 4 weeks.

SURGY 616

Plastic and Reconstructive Surgery. SU, FA, WI, SP. Director: J. Curtin, M.D. The basic surgical principles of wound care, wound treatment, and general techniques associated with the treatment of acute trauma, burns, lacerations, and blunt trauma are studied. Experience is provided in excisional and reparative surgery and in the plastic surgical management of neoplasms. Prerequ: SURGY 601; Elective, 6-8 weeks.

SURGY 626

Principles of Urology. SU, FA, WI, SP. Director: C. McKiel, Jr., M.D. This clerkship provides further experience in the diagnosis and management of urological problems as a supplement to the basic clerkship in surgery. Opportunities are available to learn the basic diagnostic and therapeutic techniques employed in urology. Prerequ: SURGY 601; Elective; 4 weeks.

- SURGY 627** *Genitourinary Neoplasia.* SU, FA, WI, SP. Director: M. Flanagan, M.D. This course is designed to present the basic concepts of neoplasia, using the genitourinary neoplasms as models. These neoplasms have been selected because collectively they span the entire spectrum of malignancy. The student actively participates in the management of both hospitalized and ambulatory patients. Multidisciplinary seminars and individual projects are available. Departmental approval required. Prerequ: SURGY 601; Elective; 4 weeks.
- SURGY 651** *Clinical Orthopedics.* SU, FA, WI, SP. Director: G. Landon, M.D. The primary emphasis is on examination, diagnosis, pathology, and treatment of conditions affecting the musculoskeletal system. The student participates in clinical work in physicians' offices and hospital facilities such as the cast room and the operating room. Audiovisual materials from the orthopedic library are available. Prerequ: SURGY 601; Elective; 4 weeks.
- SURGY 652** *Orthopedic Research.* FA, SP. Director: J. Galante, M.D. Research and bioengineering as applied to the musculoskeletal system are studied with particular emphasis on the pathomechanics of human gait, mechanics of lifting, experimental use of implants in animals and their effects on biologic systems. The research laboratories of the department are available for independent projects and preceptorial work. Prerequ: SURGY 601; Elective; 8 weeks.
- SURGY 653** *Spinal Afflictions.* FA, WI, SP. Director: R. DeWald, M.D. The course is designed to introduce the student to spinal deformities in clinical practice, their radiology, pathology, and surgery. Individual projects are required. Practical work is available in materials engineering. Prerequ: SURGY 651; Elective; 12 weeks.
- SURGY 654** *Hand Surgery.* SU, FA, WI, SP. Director: R. Schenck, M.D. Hand Surgery combines techniques of both plastic and orthopedic surgery. Operative technique is broadened by exposure in the office for preoperative selection and postoperative management of patients. A basic reading list will provide the fundamentals, and microsurgical practice is available in the laboratory preparatory for reconstruction and replantation. Prerequ: SURGY 601; Elective; 4 weeks.
- SURGY 656** *Clinical Neurosurgery.* SU, FA, WI, SP. Director: W. Whisler, M.D., Ph.D. This clinical clerkship expands upon and demonstrates the practical application of neurological sciences. The emphasis is on diagnosis and pathophysiological correlation of diseases of the nervous system. Practical application of neurosurgical management and diagnosis as well as the treatment of neurosurgical emergencies is studied in detail. Prerequ: SURGY 601; Elective; 4 weeks.

SURGY 657

Principles of Ophthalmic Examination. SU, FA, WI, SP. Director: W. Deutsch, M.D. Under the supervision of the staff, practical instruction is provided in the essentials of ophthalmic examination. Special emphasis is on the proper use of instruments.
Prerequ: CLTUT 512; Elective; 2 weeks.

SURGY 658

Research in Ophthalmology. SU, FA, WI, SP. Director: W. Frank Hughes, Ph.D. Research projects are available for students with a special interest in ophthalmology. Individual projects may be arranged with the department in cooperation with appropriate basic science or clinical departments.
Prerequ: INMED 601; SURGY 601; Elective; 12 weeks.

SURGY 659

Otolaryngology. SU, FA, WI, SP. Director: D. Caldarelli, M.D. Clinical experience is provided in the diagnosis and management of patients with diseases of the ear, nose, throat, head, and neck. Office practice, in addition to the care of hospitalized patients, provides the basis for clinical instruction, with emphasis on case study and proper use of instruments. Departmental pathology, radiology, and otology conferences and journal club are included. A head and neck anatomic instruction course is provided and a multidisciplinary head and neck conference is available.
Prerequ: SURGY 601; Elective; 4 weeks.

SURGY 661

Surgical Oncology. SU, FA, WI, SP. Director: S. Economou, M.D. Concentrated experience in the surgical diagnosis and management of patients with tumors is provided. Correlation of surgical problems with anatomic and pathological physiology is stressed, including examination of gross and microscopic tissue. Attendance at the tumor clinic, tumor conference, and head and neck tumor conference is required.
Prerequ: SURGY 601; Elective; 6-12 weeks.

SURGY 670

Speech and Hearing. SU, FA, WI, SP. Director: V. Wolfe, Ph.D. The course includes an introduction to speech, language and hearing problems. Observation and interaction with patients demonstrating aphasia, dysarthria, stuttering, cleft palate, and developmental speech abnormalities are provided. Experience in interpretation of basic hearing assessment, as well as special auditory tests to differentiate conductive and sensoryneural hearing loss; cochlear and retrocochlear pathology; and nonorganic and organic hearing loss is also provided.
Prerequ: CLTUT 512; Elective; 2-4 weeks.

SURGY 671

Thoracic Surgery. SU, FA, WI, SP. Director: C. Kittle, M.D. The diagnosis, operative, and postoperative care of patients with pulmonary and esophageal disorders are studied in both hospitalized and ambulatory patients. In addition to assisting in patient care, topics are assigned for discussion. Conferences and independent projects are encouraged.
Prerequ: SURGY 601; Elective; 4 weeks.

Departments

The following are departments in Rush Medical College:

I. Biological and Behavioral Sciences

- Anatomy
- Biochemistry
- Immunology/Microbiology
- Pharmacology
- Physiology
- Psychology and Social Sciences

II. Medical Sciences and Services

- Dermatology
- Family Practice
- Internal Medicine
- Neurological Sciences
- Nuclear Medicine
- Pathology
- Pediatrics
- Physical Medicine and Rehabilitation*
- Preventive Medicine
- Psychiatry

III. Surgical Sciences and Services

- Anesthesiology
- Cardiovascular-Thoracic Surgery
- Diagnostic Radiology
- General Surgery
- Neurological Surgery
- Obstetrics and Gynecology
- Ophthalmology
- Orthopedic Surgery
- Otolaryngology and Bronchoesophagology
- Plastic and Reconstructive Surgery
- Therapeutic Radiology
- Urology

*Status is that of a program rather than a department.



Rush Medical College Faculty Roster by Department

Anatomy

Schmidt, Anthony J., B.A., M.S., Ph.D., Chairperson
 Colgan, James A., B.S., Ph.D., Assistant Professor
 Dinsmore, Charles E., A.B., Ph.D., Assistant Professor
 Durica, Thomas E., B.S., Ph.D., Assistant Professor
 Dybas, Linda K., B.A., M.A., Dr. Hum. Biol., Assistant Professor of
 Biology, Knox College
 Galante, Jorge O., B.A., M.D., D.M.Sc., Professor, Professor of
 Orthopedic Surgery, PSLH
 Hough, John C., Jr., B.S., M.S., Ph.D., Assistant Professor of
 Biology, Knox College
 Hovde, Christian, A.B., M.A., Ph.D., D.D., Assistant Professor,
 Associate Professor of Religion and Health, Assistant Professor of
 Psychiatry
 Hughes, W. Franklin, A.B., M.S., Ph.D., Associate Professor
 Jacob, Susan K., B.S., Ph.D., Assistant Professor
 Kerns, James M., B.A., M.S., Ph.D., Associate Professor
 Khedroo, Lawrence G., B.S., D.D.S., M.D., Assistant Professor,
 Assistant Professor of General Surgery, SCH
 Khodadad, Jena K., B.S., M.S., Ph.D., Assistant Professor,
 Assistant Professor of Pathology
 Maibenco, Helen C., B.S., M.S., Ph.D., Professor
 Martinek, John J., B.Ed., Ph.D., Associate Professor, Associate
 Professor, Grinnell College
 Schmidt, Anthony J., B.A., M.S., Ph.D., Professor and Chairperson
 Schwartz, David E., B.S., Ph.D., Assistant Professor
 Seale, Raymond U., B.S., M.A., Ph.D., Professor

Anesthesiology

Ivankovich, Anthony D., M.D., Professor and Chairperson
 Acuna, Antonio, B.S., M.D., Assistant Professor, PSLH
 Badrinath, Shyamala K., M.B.B.S., Assistant Professor, PSLH
 Boggs, Roy, B.A., M.D., Associate Professor, PSLH
 Bondoc, Felipe, B.S., M.D., Associate, MSHMC
 Braun, Hildegard, Ph.D., Assistant Professor, Assistant Professor of
 Surgery, PSLH
 Co, Licensia L., A.A., M.D., Associate Professor, MSHMC
 Cocadiz, Norval T., M.D., Instructor, CH

Key:

CDH—Central DuPage Hospital Staff
 CH—Christ Hospital Staff
 CMGH—Community Memorial General Hospital
 GCH—Galesburg Cottage Hospital Staff
 GH—Grant Hospital
 MSHMC—Mount Sinai Hospital Medical Center Staff
 PSLH—Presbyterian-St. Luke's Hospital Staff
 SCH—Swedish Covenant Hospital Staff
 SRH—Schwab Rehabilitation Hospital Staff
 WSH—West Suburban Hospital Staff

Diamond, Bruce I., B.A., M.S., Ph.D., Assistant Professor, MSHMC
 Djordjevic, Ljubomir, D.E., M.S., Ph.D., Assistant Professor, PSLH
 Doncheff, Iwan, B.S., M.D., Assistant Professor, CH
 Duque, Adoracion, M.D., Instructor, MSHMC
 Ecanow, Bernard, Ph.D., Visiting Professor, PSLH
 El Ganzouri, Abdel R., P.N.S., M.B.B.C., F.R.C.S., Assistant Professor, PSLH
 Elbaz, Nabil M.I., M.D., Assistant Professor, PSLH
 Ford, Erica W., M.B.C.H., F.R.A.P., Assistant Professor, PSLH
 Garla, Prabhakah G.N., M.D., Assistant Professor, PSLH
 Gottschalk, William, B.A., M.D., Professor and Associate Chairperson, Director of Section of Obstetric Anesthesia, Professor of Obstetrics and Gynecology, PSLH
 Hahn, W. Robert, B.A., M.D., Visiting Assistant Professor, WSH
 Han, Kyung Min, M.D., Assistant Professor, PSLH
 Havdala, Henri S., B.S., M.D., Professor, MSHMC
 Heckel, V. Eileen, B.S., M.D., Associate Professor, PSLH
 Heller, Floyd N., B.S., M.D., Associate Professor, PSLH
 Ivankovich, Anthony D., M.D., Professor and Chairperson, PSLH
 Juaneza, Teresita, M.D., Instructor, MSHMC
 Keane, Donald M., M.D., A.B.A., Assistant Professor, PSLH
 Keh Wong, Elisa S., B.S., M.D., Assistant Professor, PSLH
 Kolina, John S., M.D., Assistant Professor, PSLH
 Lai, Joseph C. C., M.B., Assistant Professor, PSLH
 Lai, Tai Min, M.D., Instructor, CH
 Larson, John M., B.A., M.D., Assistant Professor, CMGH
 Lastres, Enrique J., B.S., M.D., Assistant Professor, CMGH
 Lin, Jui Kuang, M.D., Instructor, CH
 Loesch, Junior J., B.A., M.D., Assistant Professor, GCH
 Mady, Venkatgiri, M.D., Instructor, MSHMC
 Metha, Mansukh H., M.B.B.S., Instructor, MSHMC
 Morch, E. Trier, M.D., Ph.D., Emeritus Professor, PSLH
 Murphy, Peter, B.C.H., M.D., Associate Professor, PSLH
 Nelson, Robert J., M.D., Member, GCH
 Prasad, Neerukonda, M.B.B.S., Instructor, CH
 Prasannkumar, Lingasetty, M.B.B.S., D.A., Assistant Professor, PSLH
 Redlin, Thomas A., B.S., M.D., Assistant Professor
 Rhim, Ihm G., B.A., M.D., Instructor, CH
 Rose, Raymond F., M.D., Emeritus Professor, CMGH
 Sadove, Max S., M.D., Professor, PSLH
 Santander, Marc, M.D., Assistant Professor, CH
 Shima, Arthur T., M.D., Visiting Professor, WSH
 Silins, Astrica I., M.D., Assistant Professor, PSLH
 Stetson, John B., M.D., Professor, PSLH
 Tennant, Maurice M., B.S., M.D., Assistant Professor, CH
 Thomason, Richard, M.D., Assistant Professor
 Tio, Diego U., B.S., M.D., Associate, MSHMC
 Tsai, Houn, M.D., Instructor, CH
 Wong, Alfonso Y., M.D., Assistant Professor, CH

Biochemistry

Kuettner, Klaus E., B.S., M.S., Ph.D., the John W. and Helen H. Watzek Chairperson

Anderson, Kenning M., B.S., M.S., M.D., Ph.D., Associate Professor, Assistant Professor of Internal Medicine, PSLH

Bezkorovainy, Anatoly, B.S., M.S., J.D., Ph.D., Professor

Cohen, Maynard M., B.A., M.D., Ph.D., Professor, Professor and the Jean Schweppe Armour Chairperson of Neurological Sciences, PSLH

Cole, Edmund, B.S., M.S., Ph.D., Associate Professor, Associate Professor of Internal Medicine, PSLH

Demidow, Ludmilla, B.S., M.S., Instructor

Dubin, Alvin, B.S., M.S., Associate Professor, Director of Biochemistry, Hektoen Institute

Gotterer, Gerald S., A.B., M.D., Ph.D., Associate Professor, Assistant Professor of Internal Medicine, PSLH

Harris, Leland, B.S., M.S., Ph.D., Professor, Professor, Knox College

Harrison, William H., B.S., M.S., Ph.D., Professor, Professor of Neurological Sciences, PSLH

Hayashi, James A., B.S., M.S., Ph.D., Professor, PSLH

Hoskin, Francis C.G., B.A., M.S., Ph.D., Visiting Professor, Complement Faculty and Professor of Biology, IIT

Kachmar, John F., B.S., M.S., Ph.D., Associate Professor, PSLH

Kornel, Ludwig, M.D., Ph.D., Professor, Professor of Internal Medicine, PSLH

Kuettner, Klaus E., B.S., M.S., Ph.D., Professor and Chairperson, Professor of Orthopedic Surgery, PSLH

Kumar, Sudhir, B.S., M.S., Ph.D., Assistant Professor, Associate Professor of Neurological Sciences, CH

Lobstein, Otto E., B.S., Ph.D., Associate Professor, MSHMC

Mattenheimer, Hermann G.W., M.D., D.Sc., Professor and Associate Chairperson

Morley, Colin G.D., B.S., Ph.D., Assistant Professor

Rafelson, Max E., Jr., B.S., Ph.D., Professor

Schwartz, David E., B.S., Ph.D., Assistant Professor

Sky-Peck, Howard H., B.S., Ph.D., Professor

Thonar, Eugene, B.S., Ph.D., Assistant Professor, Principal Investigator, William Noble Lane Medical Research Organization

Uhlenhopp, Elliott L., B.A., Ph.D., Assistant Professor, Assistant Professor, Grinnell College

Weinstock, Albert, B.A., M.S., Ph.D., Assistant Professor, Assistant Professor of Pathology, MSHMC

Whisler, Kenneth E., A.B., M.S., Ph.D., Assistant Professor

Whisler, Walter, A.B., M.D., Ph.D., Professor, Professor and Chairperson of Neurological Surgery, Professor of Neurological Sciences, PSLH

**Cardiovascular-
Thoracic Surgery**

Najafi, Hassan, M.S., M.D., Chairperson
Anderson, James H., B.S., M.D., Complemental Faculty, WSH
Anderson, Robert J., B.S., M.D., Instructor, PSLH
Bojar, Robert M., B.S., M.D., Instructor, PSLH
Choudhry, Anwar S., F.S.C., M.B.B.S., Instructor, CH
DeLaria, Giacomo A., B.S., M.D., Assistant Professor, PSLH
DeTakats, Geza, B.A., M.S., M.D., Emeritus Professor, PSLH
Dye, William S., Jr., A.B., B.S., M.D., Consulting, PSLH
Faber, L. Penfield, B.A., M.D., Professor, PSLH
Faro, Richard, B.S., M.D., Instructor, PSLH
Goldin, Marshall D., M.S., M.D., Assistant Professor, PSLH
Hunter, James A., B.S., M.D., Professor, PSLH
Javid, Hushang, M.S., M.D., Ph.D., Professor, PSLH
Jensik, Robert J., B.S., M.S., M.D., Professor, PSLH
Julian, Ormand C., M.S., Ph.D., M.D., Emeritus Professor, PSLH
King, Jerry N., M.S., M.D., Assistant Professor, CH
Kittle, C. Frederick, B.A., M.S., L.L.D., M.D., Professor, PSLH
Langston, Hiram T., B.A., M.S., M.D., Visiting Professor, PSLH
Meng, Ronald, B.S., M.S., M.D., Instructor, PSLH
Milloy, Frank J., M.S., M.D., Associate Professor, PSLH
Monson, David O., B.S., B.A., M.D., Assistant Professor, PSLH
Najafi, Hassan, M.S., M.D., Professor and Chairperson, PSLH
Natale, John, B.S., M.D., Instructor, PSLH
Oldfield, R. Charles, B.S., M.D., Assistant Professor, CMGH
Roberts, Jack C., B.A., M.D., Instructor, CH
Serry, Cyrus, M.D., Assistant Professor, PSLH
Spinazzola, Angelo J., M.S., M.D., Assistant Professor, CH
Tsai, Eugene, M.S., M.D., Associate Professor, CH
Weinberg, Milton, Jr., M.D., Professor, PSLH
Welsher, Wayne, B.S., M.D., Instructor, PSLH

Dermatology

Malkinson, Frederick, D.M.D., M.D., Chairperson
Bielinski, Stefan, B.S., M.D., Associate Professor, PSLH
Blankenship, Marshall, B.M., M.D., Associate Professor, PSLH
Earles, Rene, B.S., M.D., Instructor, PSLH
Ertle, James O., A.B., M.D., Assistant Professor, PSLH
Gehlmann, Louisa M. K., B.S., M.D., Instructor, PSLH
Haeberlin, John B., Jr., B.S., M.D., Emeritus Professor, PSLH
Kalis, John B., B.S., M.D., Assistant, PSLH
Kaplan, Sidney, M.S., M.D., Associate Professor, PSLH
Keane, John T., B.S., M.D., Assistant Professor, PSLH
Kirschenbaum, M. Barry, A.B., B.S., M.D., Member, SCH
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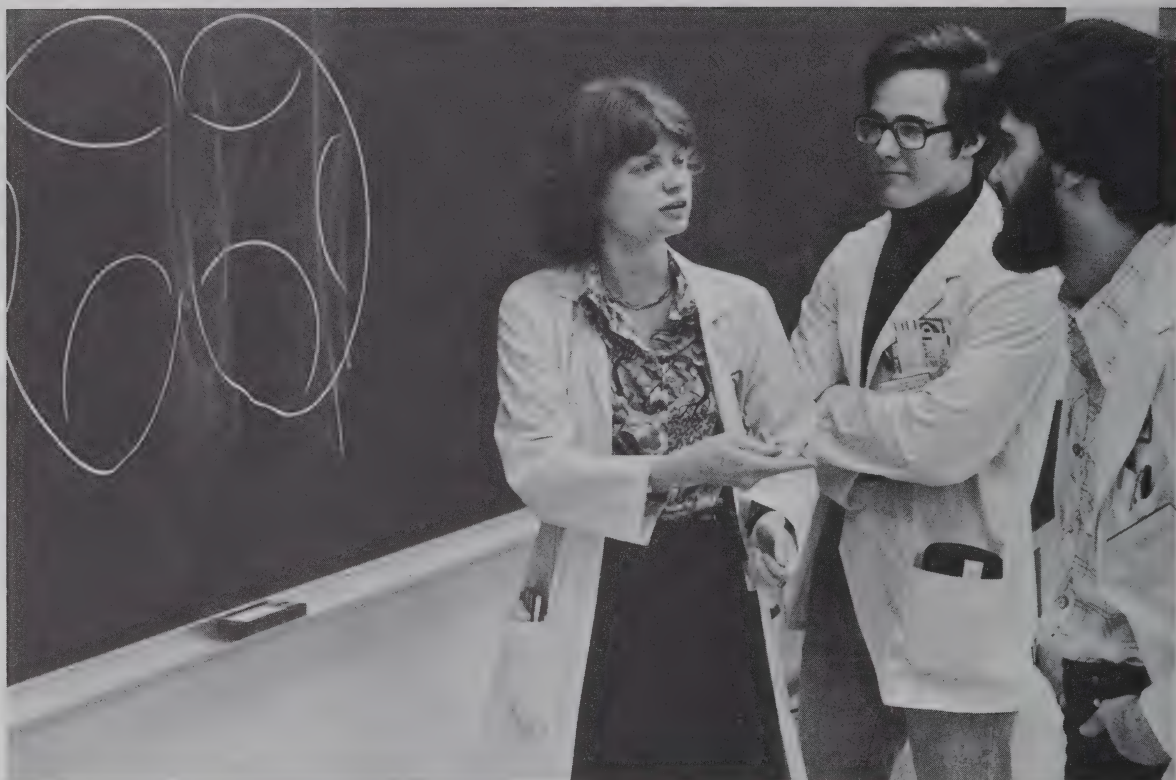
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Preventive Medicine

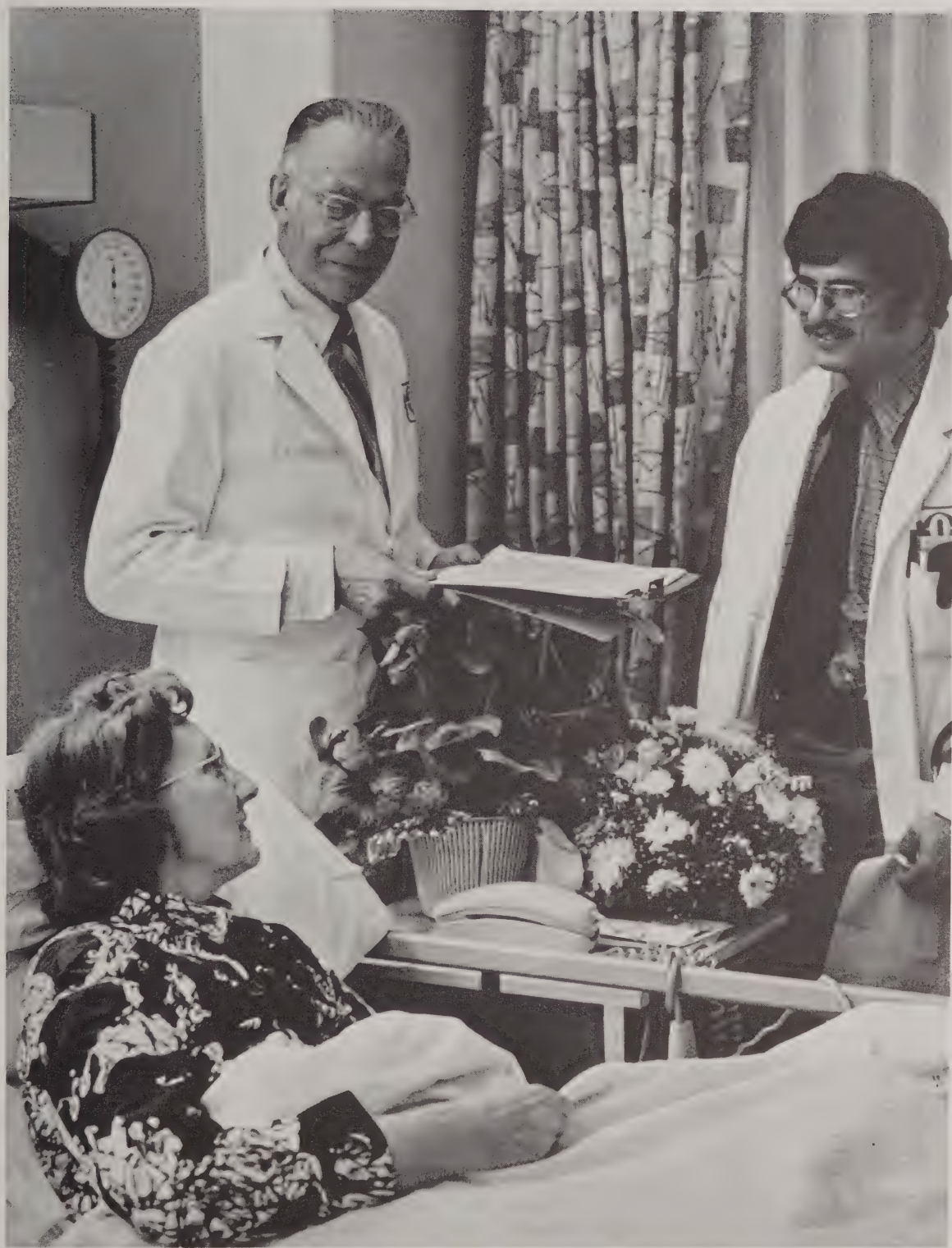
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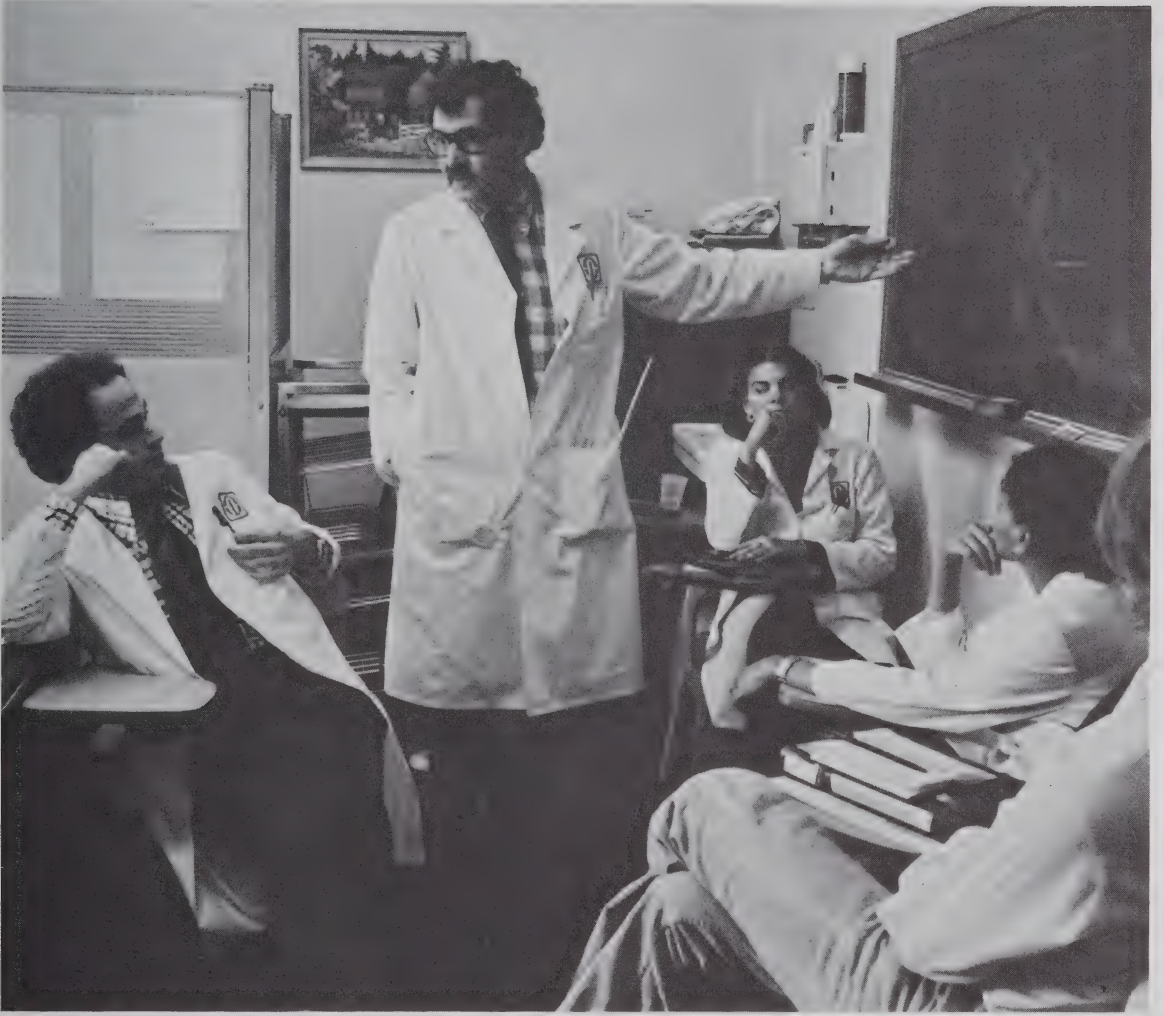
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 Forech, Jeff, M.D., Instructor, PSLH
 Garvin, John S., A.B., B.S., M.D., Professor, Visiting Professor of
 Neurological Sciences, PSLH
 Gerty, Francis J., B.S., M.D., Emeritus Professor, PSLH
 Goldberg, Arnold, B.S., M.D., Visiting Professor
 Guise, Gracia, B.S., M.S., Assistant Professor, Assistant Professor
 of Psychology and Social Sciences, PSLH
 Gutmann, Cheryl, B.A., M.Sci., M.D., Instructor, PSLH
 Gwyer, Fred V., B.S., M.D., Assistant Professor, PSLH
 Ha, Yong Soo, M.D., Instructor, PSLH
 Halper, Ira S., B.A., M.D., Assistant Professor, PSLH
 Hanni, John W., A.B., M.D., Professor, PSLH
 Harbour, Jeanne D., M.D., Assistant Professor, PSLH
 Hoffman, Michael, M.D., Instructor, PSLH
 Holinger, Paul C., B.A., M.P.H., M.D., Associate Professor, PSLH
 Hovde, Christian A., A.B., M.A., D.D., Ph.D., Visiting Assistant
 Professor, Assistant Professor of Anatomy, Associate Professor of
 Religion and Health, PSLH



Jones, Frank DeLeon, B.S., M.D., Assistant Professor
 Katz, Jerome I., B.S., M.S., M.D., Assistant Professor, PSLH
 Kraines, Samuel H., M.D., Assistant Professor, PSLH
 Kravitz, Howard, B.S., D.O., Instructor, PSLH
 Kuhl, Dorothy L., A.B., M.D., Instructor, PSLH
 Lane, Harold J., B.S., M.D., Instructor, PSLH
 Lazarus, Lawrence W., B.A., M.D., Assistant Professor, PSLH
 Lesser, Jary M., B.A., M.D., Assistant Professor, PSLH
 Levitt, LeRoy P., B.S., M.D., Professor, MSHMC
 Levy, Allan, B.S., M.D., Instructor, PSLH
 Libert, Samuel A., M.B., M.D., Associate
 Lofgren, Katharine A., B.A., M.S.W., Instructor, Instructor of
 Psychology and Social Sciences
 Mangoubi, Elie, B.S., M.D., Instructor, PSLH
 Marohn, Richard C., B.A., M.D., Associate Professor
 Meehan, Marjorie, B.A., M.D., Emeritus Assistant Professor, PSLH
 Meiszner, John, B.S., M.D., Instructor, CH
 Miller, Raymond N., A.B., B.S., M.D., Complemental Faculty,
 Leave of Absence, PSLH
 Mills, Mark, M.D., Instructor
 Morrison, David E., M.D., Assistant Professor, PSLH
 Norton, Arthur H., B.S., M.D., Associate Professor, PSLH
 O'Donnell, John W., B.S., M.D., Associate, Leave of Absence,
 PSLH
 Orloff, Mollie, M.D., Associate Professor, PSLH
 Park, Young Nam, M.D., Instructor, PSLH
 Patel, Minal, M.B.B.S., M.D., Instructor, PSLH
 Patterson, Joan, B.S., M.D., Assistant Professor, MSHMC
 Perkins, George, B.S., M.D., Assistant Professor, PSLH
 Pieper, William J., B.S., M.D., Assistant Professor, PSLH
 Pisani, Vincent D., B.A., M.A., Ph.D., Assistant Professor,
 Assistant Professor of Psychology and Social Sciences, PSLH
 Prosen, Melvin, B.S., M.D., Associate Professor, PSLH
 Rattan, Pradeep, M.B.B.S., Instructor, PSLH
 Reifman, Robert A., B.A., M.D., Assistant Professor
 Reinstein, Michael J., B.A., M.D., Assistant Professor, PSLH
 Ripeckyj, Andrew, B.A., M.D., Instructor, PSLH
 Rogers, Richard, B.S., M.A., Ph.D., Assistant Professor, Assistant
 Professor of Psychology and Social Sciences, PSLH
 Rosenthal, Maurice J., M.D., Assistant Professor, PSLH
 Sabelli, Hector, M.D., Ph.D., Assistant Professor, PSLH
 Samelson, Charles, M.D., Assistant Professor
 Sanchez, Jose Ramon, M.D., Assistant Professor, PSLH
 Scheftner, William A., B.S., M.D., Assistant Professor, PSLH
 Schwartz, Marvin, M.D., Assistant Professor, PSLH
 Smith, Garth, B.A., M.D., Assistant Professor, PSLH
 Solomon, Alfred P., B.A., M.D., Professor, PSLH
 Stampley, Jan, M.D., Instructor, PSLH
 Steed, David W., B.S., M.D., Associate Professor, PSLH
 Stein, Edward, B.S., M.D., Assistant Professor, PSLH
 St. Pierre, Aimee, M.D., Instructor
 Strozier, Charles, B.A., M.A., Ph.D., Visiting Assistant Professor



Thampy, Kishore J., M.B.B.S., Assistant Professor, PSLH
 Tilkin, Jeffrey M., M.D., Assistant Professor, PSLH
 Trager, Eugene P., B.S., M.D., Assistant Professor
 Trakas, Demetrius A., M.D., Assistant Professor, PSLH
 Trujillo-Gomez, Jaime, M.D., Assistant Professor
 Vasquez, Juan J., M.D., Assistant Professor, PSLH
 Voltolina, Eugene, B.S., M.D., Instructor, CH
 Waldman, Maurice, B.A., M.D., Assistant Professor, PSLH
 Watson, Laura H., B.A., M.A., Instructor, Instructor of Psychology
 and Social Sciences, PSLH
 Weinberg, Jack, B.S., M.D., Professor, PSLH
 Weiner, Barbara A., B.S., J.D., Associate
 West, James, M.D., Assistant Professor, PSLH
 Wolf, Marion E., B.S., M.S., M.D., Assistant Professor, Leave of
 Absence, PSLH
 Wolff, John R., M.S., M.D., Professor, Emeritus Professor of
 Obstetrics and Gynecology, PSLH
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 Yballe, Sonia, B.A., M.D., Instructor, MSHMC
 Young, Janice, B.A., M.D., Instructor, PSLH
 Zadylak, Robert G., B.S., M.D., Assistant Professor, PSLH

**Psychology and
 Social Sciences**

Cartwright, Rosalind D., B.A., M.A., Ph.D., Chairperson
 Anderson, David R., B.A., M.A., Ph.D., Assistant Professor,
 Assistant Professor of Psychiatry, PSLH
 Bacon, Lynd, B.A., M.A., Ph.D., Instructor, PSLH
 Bieliauskas, Linas A., B.S., M.S., Ph.D., Assistant Professor, PSLH
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 PSLH
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 Professor of Pediatrics, PSLH
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 Chairperson, PSLH
 Cheifetz, David I., M.A., Ph.D., Professor, PSLH
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 Psychiatric Nursing, PSLH
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 Counte, Michael A., B.A., M.A., Ph.D., Assistant Professor
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 deToledo-Morrell, Leyla, B.A., M.A., Ph.D., Associate Professor,
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 Driscoll, Paul F., A.B., M.Ed., Ph.D., Assistant Professor, Assistant
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 Exum, Dolores B., B.A., M.S.W., Associate, Associate in
 Preventive Medicine
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 Zeldow, Peter, A.B., M.S., Ph.D., Assistant Professor, PSLH

Therapeutic Radiology

Hendrickson, Frank R., B.A., M.D., Chairperson
Chacko, Donna C., M.D., Assistant Professor, PSLH
Chung-Bin, Anthony, B.S., M.S.C., Associate Professor, Associate
Professor of Diagnostic Radiology, PSLH
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Reddy, Salitha, M.D., Assistant Professor, PSLH
Rozenfeld, Martin, M.S., Ph.D., Associate Professor, PSLH
Sarin, Pramilla, M.B.B.S., Assistant Professor, CH
Saxena, Virendra S., B.S., M.B.B.S., Associate Professor, PSLH,
CH
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Silverstein, Edward, A.B., M.S., Ph.D., Assistant Professor, PSLH
Stefani, Stefano S., M.D., Professor, MSHMC
Wachtor, Thomas, B.S., M.S., Assistant Professor, PSLH

Urology

McKiel, Charles F., Jr., A.B., M.D., Chairperson
Babanoury, Agha B., M.D., Assistant Professor, GCH
Baumgartner, George C., M.D., Assistant Professor, PSLH
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Buckun, George R., B.S., M.D., Associate, CMGH
Burkholder, Theodore M., B.S., M.D., Member, CH
Callahan, Daniel H., B.S., M.D., Associate Professor, PSLH
Cottrell, Thomas L. C., B.S., M.D., Visiting Assistant Professor,
PSLH
Cottrell, Thomas L. C., Jr., B.S., M.D., Instructor, PSLH
Curl, George G., M.D., Assistant Professor, WSH
DeMarco, Carl J., B.S., M.D., Instructor
Eghrari, Faramarz, M.D., Instructor, MSHMC
Ekbil, Shahid S., M.B.B.S., Assistant Professor, PSLH
Evans, Thomas A., A.B., M.D., Assistant Professor, CH
Firlit, Robert, B.S., M.D., Instructor, CH
Flanagan, Malachi J., M.D., Professor, PSLH
Gernon, John T., B.S., M.S., M.D., Member, SCH
Gersack, John R., A.B., M.D., Associate, CH
Gomberg, David, M.D., Associate, PSLH



Graf, Edwin C., B.S., M.D., Professor, PSLH
Guinan, Patrick, B.S., M.D., Visiting Assistant Professor, PSLH
Haeger, R. Ross, B.S., M.D., Associate Professor, WSH
Hoeksema, Jerome, B.S., M.D., Instructor, PSLH
Hoyme, Kermit, M.D., Instructor, CH
Kovacs, Joseph, B.S., M.D., Assistant Professor, CH
McKiel, Charles F., Jr., A.B., M.D., Professor and Chairperson,
PSLH
Merricks, James W., B.A., B.S., M.D., Emeritus Professor, PSLH
Papiernak, Frank B., B.A., M.D., Associate Professor, PSLH
Pessis, Dennis A., B.S., M.D., Instructor, PSLH
Rooney, Peter W., B.S., M.D., Instructor, PSLH
Sadoughi, Nader, M.D., Associate Professor, MSHMC
Sosenko, George, B.S., M.D., Instructor, PSLH
Strzyz, James, M.D., Instructor, CH
Tsou, Richard I., B.A., M.D., Instructor, PSLH
Valenta, James E., M.D., Associate Professor, PSLH
Weinstein, Robert J., B.A., M.D., Instructor, MSHMC
Zimmerman, Robert, B.A., M.D., Instructor, PSLH

**Rush Medical College
First Postgraduate Year Appointments—
Class Graduating June 13, 1981**

Jose Albert	General Surgery, Michigan State University: Butterworth
Oscar Alonso	Otolaryngology, University of Illinois: Eye and Ear
Randall Andrews	Pediatrics, St. Louis University: Group Hospitals
Camilla Ashley	Psychiatry, The University of Chicago: Michael Reese Hospital and Medical Center
David Baldwin	Internal Medicine, Harvard University: Peter Bent Brigham Hospital
Thomas Bardolph	Flexible, University of Southern California: Los Angeles County
Alvydas Baris	Family Practice, University of Wisconsin: Wausau Hospitals
Craig Bartos	Flexible, Michigan State University: St. Mary's Hospital
Deborah Basile	Internal Medicine, Northwestern University: McGaw Medical Center
Marti Bazell	Family Practice, Chicago Medical School: Cook County Hospital
Frank Beardon	Internal Medicine, Case Western Reserve University: Cleveland Clinics
Jeffrey Behr	Orthopedic Surgery, Loyola University: University Hospitals
Mary Burns	Flexible, University of Illinois: Mercy Hospital
William Carron	Internal Medicine, University of Southern California: Los Angeles County
Roy Chapman	Flexible, University of Illinois: Mercy Hospital
Elbert Collins	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
Robert Conter	General Surgery, UCLA: University Hospitals
Ethan Daniels	Internal Medicine, Washington University: Jewish Hospital
Karen Dedman	Family Practice, University of North Carolina: MAHEC
Robert Deitch	Otolaryngology, University of Illinois: Eye and Ear
Elise Deutsch	Otolaryngology, University of Illinois: Eye and Ear
Neal Devitt	Family Practice, University of Illinois: Lutheran General Hospital
Charles Dillon	Internal Medicine, University of Massachusetts: Berkshire
Diane DiMaggio	Pediatrics, Northwestern University: Children's Memorial Hospital
David Dobrin	Flexible, RPSLMC: Mount Sinai Hospital Medical Center
Claire Doerschuk	Pathology, The University of Chicago: Clinics
Helen Donatelli	Flexible, University of Illinois: Mercy Hospital
Mary Draper	Family Practice, University of California, San Diego: Affiliates
Joseph D'Silva	Orthopedic Surgery, RPSLMC: Presbyterian-St. Luke's Hospital
Terry DuClos	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
William Eckstein	Pediatrics, RPSLMC: Presbyterian-St. Luke's Hospital
Tasia Economou	Otolaryngology, UCLA: University Hospitals
Roy Eichengreen	Family Practice, University of Connecticut: Middlesex
Leon Ewin	Family Practice, Loma Linda University: Kaiser Foundation
Daniel Featherston	Internal Medicine, Louisiana State University, Tulane: Ochsner Foundation
Karen Forsman	Internal Medicine, Washington University: Barnes Hospital
Dale Foster	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
Gary Frumkin	Family Practice, RPSLMC: Community Memorial General Hospital
Linda Gallo	Diagnostic Radiology, RPSLMC: Presbyterian-St. Luke's Hospital
Susan Garst	Pediatrics, University of Illinois: Affiliates
Patricia Gavin	Diagnostic Radiology, RPSLMC: Presbyterian-St. Luke's Hospital
Scott Ghinazzi	Family Practice, Medical College of Wisconsin: Waukesha
Arnold Goldberg	Family Practice, Northwestern University: St. Joseph's Hospital
Janet Hackman	PG-1 deferred
Mary Haller	Internal Medicine, Michigan State University: Associated Hospitals
John Hamby	General Surgery, RPSLMC: Presbyterian-St. Luke's Hospital
Cynthia Heckman	Family Practice, University of Michigan: St. Joseph Mercy Hospital
David Hines	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital

Gail Hopkins	Orthopedic Surgery, Loyola University: Affiliates
Paul Horwitz	Flexible, University of Arizona: Tuscon
Deborah Jalowiec	Ophthalmology, University of Kentucky: Medical Center
Daniel Jarzemsky	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
Linda Kaplan	Family Practice, University of Wisconsin: Wausau
Amelia Kaymen	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
James Kelly	Neurology, Columbia: Presbyterian Hospital
Sara Kennedy	Internal Medicine, Columbia: St. Luke's Hospital
Doris Kero-Castell	Internal Medicine, Loyola University: VA Hines Hospital
Shahid Khan	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
Kevin Kirby	Psychiatry, Cornell University: Payne Whitney Hospital
Michael Kohrman	Rotating, Regional District Hospital: Sweden
John Kolb	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
Steven Kooperman	Family Practice, University of Wisconsin: Eau Claire
Judith Kooser	Pediatrics, The University of Chicago: Clinics
Kenneth Korzec	Family Practice, RPSLMC: West Suburban Hospital
Chris Kosakowski	Obstetrics/Gynecology, University of Florida: William Shands Hospital
James Kuechler	Therapeutic Radiology, RPSLMC: Presbyterian-St. Luke's Hospital
John LaFlore	Otolaryngology, RPSLMC: Presbyterian-St. Luke's Hospital
Janet Lawkis Gaddy	General Surgery, UCLA: University Hospitals
Marlene Lazarus	Psychiatry, University of California, Irvine: Affiliates
Thomas Liao	Pediatrics, RPSLMC: Presbyterian-St. Luke's Hospital
Sarah Lincoln	Family Practice, RPSLMC: West Suburban Hospital
Walter Lindsey	Internal Medicine, University of Southern California: Los Angeles County
Eric Lyerla	Internal Medicine, University of California, San Francisco: Highland
James Magary	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
Stavros Maltezos	Internal Medicine, Grant Hospital
Mark Marzano	Family Practice, University of Iowa: Hospitals and Clinics
David Massman	General Surgery, University of Wisconsin: University Hospitals
Daniel McGee	Neurosurgery, RPSLMC: Presbyterian-St. Luke's Hospital
James Memmen	General Surgery, University of Florida: William Shands Hospital
Lorraine Milio	Family Practice, University of Illinois: Lutheran General Hospital
Christine Mlot	Pediatrics, Michigan State University: Butterworth
Mary Moran	Internal Medicine, Regional Naval Medical Center: Portsmouth
Andrew Nakrin	Obstetrics/Gynecology, New York University: University Medical Center
Mark Nanney	Internal Medicine, University of California, Irvine: VA Long Beach
Beatrice Nelson McNeal	Internal Medicine, Dartmouth College: Hitchcock Memorial Hospital
Courtney Nevitt	Anesthesiology, RPSLMC: Presbyterian-St. Luke's Hospital
David Nordstrom	Family Practice, University of California, San Diego: Affiliates
Richard Novak	Pediatrics, University of Illinois: Affiliates
Francine Palma-Long	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
Edward Passen	Internal Medicine, Fitzsimons Army Medical Center
James Peters	Internal Medicine, University of Illinois: Affiliates
John Peters	Pediatrics, University of Illinois: Lutheran General Hospital
Brent Petersen	Internal Medicine, University of Illinois: Affiliates
Steve Petersen	Family Practice, University of Minnesota: St. Mary's Hospital
	General Surgery, RPSLMC: Presbyterian-St. Luke's Hospital
	Family Practice, University of Minnesota: St. John's Hospital
	Orthopedic Surgery, Mayo Clinic

Jack Petrie	Internal Medicine, Mayo Clinic
Isabello Reyes	Internal Medicine, Northwestern University: St. Joseph's Hospital
Sherif Rizk	General Surgery, RPSLMC: Presbyterian-St. Luke's Hospital
Lin Roberts	Pediatrics, University of Chicago: Michael Reese Hospital and Medical Center
Sarah Roskam	Family Practice, Albany Medical Center
Jonathan Rubenstein	Ophthalmology, RPSLMC: Presbyterian-St. Luke's Hospital
Robert Sbriglio	Psychiatry, New York Medical College: St. Vincent's Hospital
Richard Schifeling	Internal Medicine, State University of New York: King's County Hospital
David Schmidt	Internal Medicine, Wilford Hall USAF Medical Center
Kathleen Shannon	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
Mindaugas Siliunas	Flexible, Michigan State University: Blodgett Hospital
Camille Simon Honesty	Internal Medicine, University of Illinois: Illinois Masonic Hospital
Vesna Skul	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
Lorraine Sommerfeldt	Psychiatry, RPSLMC: Presbyterian-St. Luke's Hospital
John Stevens	Pathology, University of Wisconsin: University Hospitals
Lisbeth Suyehira	Internal Medicine, University of California, Davis: VA Martinez
Caroline Szeto	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
Michael Szewczyk	Family Practice, West Virginia University: Medical Center
Rita Tarzynski-Potempa	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
Peggy Thornton	Pediatrics, University of Illinois: Affiliates
Jeffrey Uhler	Family Practice, University of Illinois: Lutheran General Hospital
William Verre	Internal Medicine, RPSLMC: Presbyterian-St. Luke's Hospital
Jonathan Vogel	Ophthalmology, Medical College of Wisconsin: Milwaukee
Fred Volkman	Internal Medicine, Washington University: Barnes Hospital
Steven Wahls	Pediatrics, The University of Chicago: Michael Reese Hospital and Medical Center
Timothy Watson	Family Practice, RPSLMC: Presbyterian-St. Luke's Hospital
Dennis Weber	Orthopedic Surgery, Chicago Medical School: Affiliates
Neil Winston	Family Practice, Boston University: Central Maine
Jeffrey Wishik	Flexible, Wright State University: Affiliates
Lea Wrobel	Flexible, Northwestern University: McGaw Medical Center
Susan Zurowski	Neurology, Albany Medical College: Affiliates
	Flexible, University of Illinois: Illinois Masonic Hospital
	Family Practice, West Virginia University: Medical Center

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Sudhir Kumar, Ph.D.
Jeffrey Levett, Ph.D.
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Henry Schneiderman, M.D.
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Eugene J. Cherny, Student
Frank L. Bleyer, Student
Virginia Gronke, Student
Jeffrey Tienstra, Student

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Leo Boler, Student
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Rush University

All colleges of Rush University are located at the main campus of Rush-Presbyterian-St. Luke's Medical Center at 600 South Paulina Street, Chicago, Illinois 60612.

Rush Medical College

College of Nursing

College of Health Sciences

The Graduate College

Affiliated First Year Colleges

Grinnell College, Grinnell, Iowa
Knox College, Galesburg, Illinois

Hospital Network

Bethany Hospital, Chicago, Illinois
Central DuPage Hospital, Winfield, Illinois
Christ Hospital, Oak Lawn, Illinois
Community Memorial General Hospital, LaGrange, Illinois
Copley Memorial Hospital, Aurora, Illinois
Galesburg Cottage Hospital, Galesburg, Illinois
Grant Hospital of Chicago
Mile Square Health Center, Chicago, Illinois
Mount Sinai Hospital Medical Center, Chicago, Illinois
Schwab Rehabilitation Hospital, Chicago, Illinois
Skokie Valley Community Hospital, Skokie, Illinois
St. Mary's Hospital, Streator, Illinois
Swedish Covenant Hospital, Chicago, Illinois
West Suburban Hospital, Oak Park, Illinois

**Medical Center:
A Summary**

Rush-Presbyterian-St. Luke's Medical Center is the central initiating component of a comprehensive, cooperative health delivery system, serving some 1.5 million people through its own resources and in affiliation with 14 community hospitals and health care institutions in northern Illinois.

It is Rush University, and a cooperative educational system which comprises Rush Medical College, the College of Nursing, the College of Health Sciences, The Graduate College and 14 liberal arts colleges and universities in six states from Colorado to Tennessee.

It is Presbyterian-St. Luke's Hospital, a major referral center providing primary care to its immediate community, and secondary and tertiary care to patients from across the country.

It is Sheridan Road Hospital, a 139-bed community hospital serving Chicago's north side, and the 175-bed Johnston R. Bowman Health Center for the Elderly, a short-term rehabilitative facility which serves as a national model for hospital-based geriatric care.

It is a center for basic and clinical research in both traditional disciplines and in multidisciplinary centers, coordinating the attack on cancer, cardiovascular disease, and multiple sclerosis.

It is a pioneer in community medicine through its relationship with Mile Square Health Center, the creation of its own Health Maintenance Organization, ANCHOR, and its expanding services in the city and beyond.

In all, Rush-Presbyterian-St. Luke's is an organization of over 8,000 people—medical and scientific staff, faculty, students, and employees—committed to providing the best care with the highest professional standards, and with compassionate attention to the needs of every patient.

Approvals

Joint Commission on Accreditation of Hospitals
Liaison Committee for Graduate Medical Education
Liaison Committee for Medical Education
American Medical Association for Residencies for Physicians
Department of Registration and Education, State of Illinois
North Central Association of Colleges and Schools
National League for Nursing
American Nurses Association for the Continuing Education Program
National Association of Nurse Anesthetists
American Medical Association's Committee on Allied Health Education and Accreditation

Licenses

Department of Public Health, State of Illinois
Cook County Board of Health

Memberships

American Hospital Association
Illinois Hospital Association
Chicago Hospital Council
American Association of Colleges of Nursing
Blue Cross/Blue Shield Health Care Service Corporation
Association of American Medical Colleges

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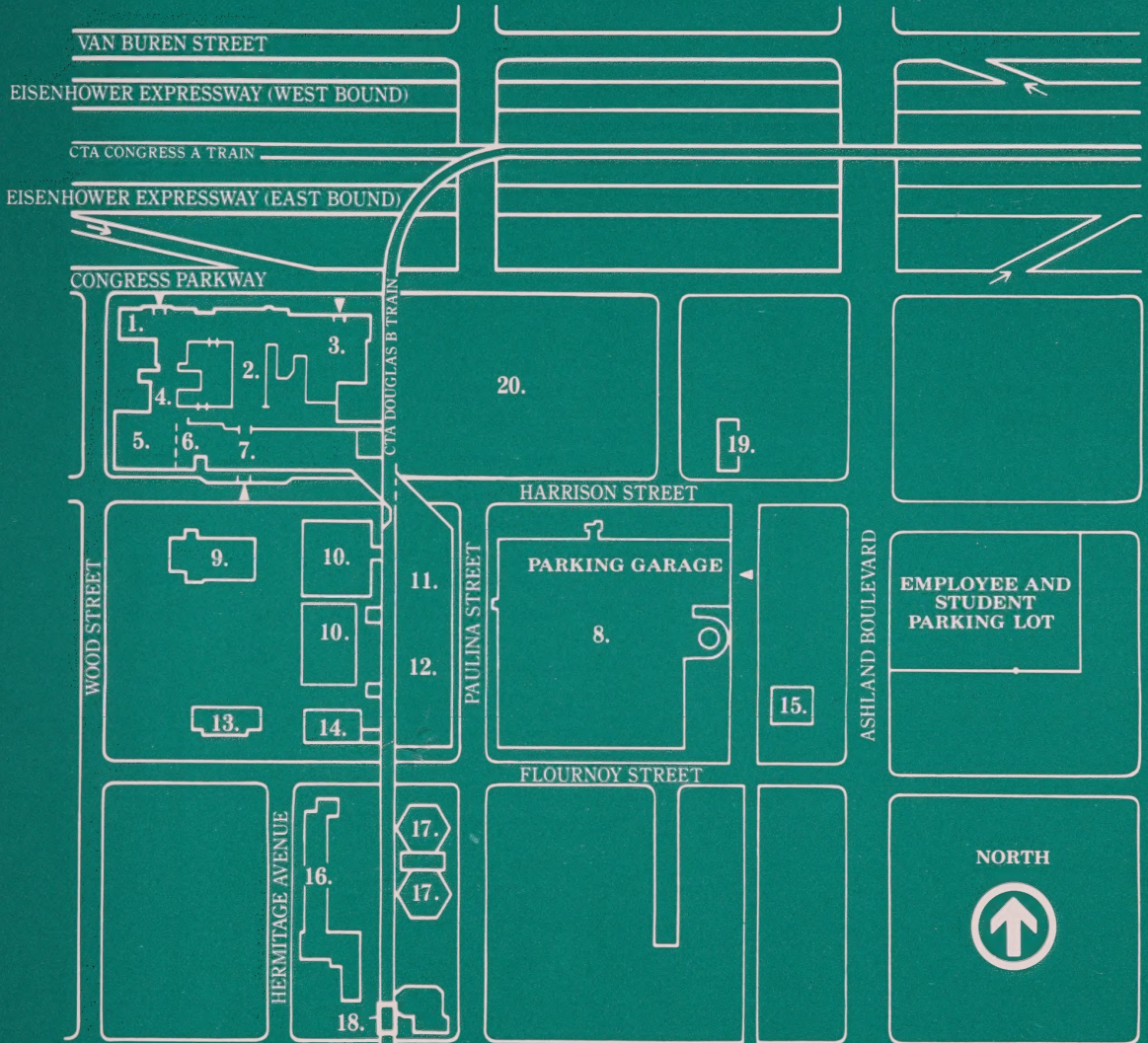
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NOTES

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**Rush-Presbyterian-St. Luke's
Medical Center
Rush University Campus**



- | | |
|------------------------------|---|
| 1. Jones | 12. Cafeteria |
| 2. Pavilion | 13. Kidston Apartments |
| 3. Kellogg Pavilion | 14. McCormick Apartments |
| 4. Murdock | 15. Laurance Armour Day School |
| 5. Rawson | 16. Marshall Field IV Mental Health Center |
| 6. Senn | 17. Johnston R. Bowman Health
Center for the Elderly |
| 7. Jelke Southcenter | 18. Polk Street Station, CTA |
| 8. Parking Garage | 19. Warehouse |
| 9. Schweppe-Sprague Building | 20. New Patient Care Wing
(under Construction) |
| 10. Professional Buildings | |
| 11. Academic Facility | |

